Vision: To Create an Injury Free Louisiana

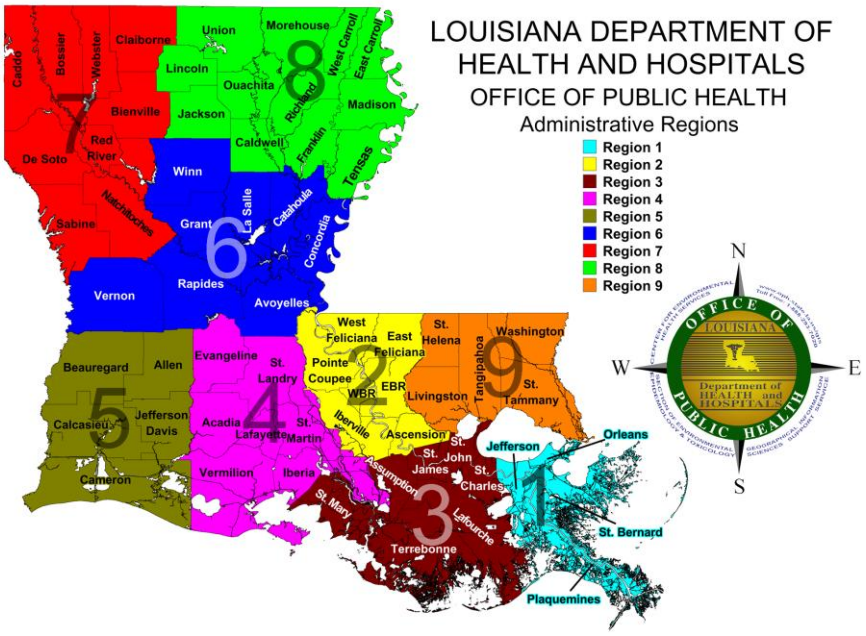
INJURY FACTS

Injuries account for 1 and every 10 deaths per year in Louisiana

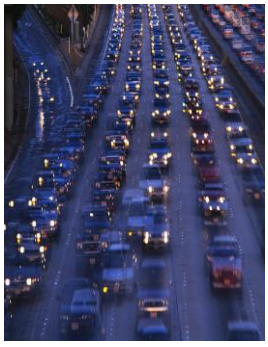
Unintentional injuries are the 4th leading cause of death in Louisiana

Injuries are the leading cause of death for people ages 1-44 in Louisiana

Approximately 4,000 lives are lost to injuries per year in Louisiana



The Louisiana Injury Prevention Plan



Produced By: The Department of Health & Hospitals, Office of Public Health, Bureau of Emergency Services, Injury Research and Prevention Program

1010 Common Street, Suite 1254

New Orleans, LA 70112

Phone: (504) 599-1080

Fax: (504) 599-1085

Website:
http://www.injury.dhh.louisiana.gov

Administration and Staff

Department of Health and Hospitals

Alan Levine, MBA, MHSA, Secretary

Jimmy Guidry, MD, State Health Officer

Office of Public Health

M. Rony François, MD, MSPH, PhD, Assistant Secretary

Bureau of Emergency Medical Services

William Clark, MD, Medical Director

William Hineman, Program Manager

Injury Research & Prevention Program Staff

Nichole M. Dupree, MPA - Program Manager

Lynn Watson, MPA - Program Coordinator, Injury Prevention

Karen Webb - Program Coordinator, Violence Prevention

Lindsey Johnson – Program Coordinator

Mona Doshani, MD, MPH – Former Public Health Epidemiologist Supervisor

Mariella Gastañaduy, MPH - Public Health Epidemiologist

Vanessa McKee, Administrative Coordinator

Center for Disease Control and Prevention

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Bobby P. Jindal
GOVERNOR

STATE OF LOUISIANA
DEPARTMENT OF HEALTH AND HOSPITALS

Department of HEALTH and HOSPITALS
Alan Levine
SECRETARY

August 1, 2009

The Louisiana Office of Public Health's Injury Research and Prevention Department is pleased to present the 2008-2010 Louisiana Injury Prevention Plan. This plan outlines goals, strategies, and activities that provide Louisianans with a roadmap that aims to create an injury-free Louisiana through the enhancement of statewide collaborative efforts.

Injuries are a major public health problem in Louisiana and remain the leading cause of death for people ages 1-44, claiming approximately 4,000 Louisianans each year. Our state has a high incidence of motor vehicle crashes, poisonings, and falls. Each year in Louisiana, about 1,000 people lose their lives in motor vehicle crashes, 451 people die from poisonings, and 9,600 people are hospitalized from fall-related injuries. We are therefore committed to reduce and eventually eliminate the pain, suffering, disability, and death caused by these preventable injuries so that Louisiana can become a safer place for all of our citizens.

The truth is that no single agency or organization can effectively serve as the leader for injury prevention, which requires a collaborative approach. Indeed, the Injury Research and Prevention Program coordinated and facilitated this planning effort with the valuable help of other state agencies and injury prevention stakeholders. All of us must continue to work together in order to give injury prevention initiatives a higher profile in our state and a greater impact on our communities.

We encourage everyone who has an interest in injury prevention to join our efforts to implement this plan and to become involved in our future planning endeavors.

Sincerely,

M. Rony François, MD, MSPH, PhD
Assistant Secretary

TABLE OF CONTENTS

Executive Summary
Louisiana Injury Prevention Plan at a Glance

Vision of Louisiana: "To Create an Injury Free Louisiana"

Injury as a Public Health Issue:
Injury is a major public health problem in both the United States and Louisiana. In 2005, injury was the leading cause of death for people ages 1-44 in Louisiana and claimed approximately 4,000 lives that year.[1] Nevertheless, the nation's and Louisiana's current investment in injury prevention programs and research is not commensurate with the magnitude of the problem. A cost analysis study in Louisiana (2004) estimated injury deaths to cost $26 million on medical care treatment and $6 billion on quality of life lost.[2]

Purpose of the Plan:
In order to address this public health problem, the Louisiana Department of Health and Hospitals (DHH), Office of Public Health (OPH), Injury Research and Prevention Program (IRP) have prepared the Louisiana Injury Prevention Plan (LIPP) to document the problem of injury in Louisiana and to guide injury prevention efforts through coordination, communication and cooperation among various programs in the Louisiana Department of Health and Hospitals (DHH) and other state and local agencies. The Plan is intended to provide a framework to improve injury prevention efforts at both the state and local levels. The recommendations should offer direction and support for more focused injury prevention and intervention activities while targeting specific state injury priorities.

Overall Goals of the Plan:
- Raise awareness of the impact of injuries in Louisiana.
- Strengthen the capacity of the Injury Prevention System at the State and local level to reduce and prevent injuries and effectively address injury prevention priorities.
- Improve coordination and collaboration among state agencies/departments and community partners to reduce and prevent injuries.
- Enhance the knowledge and skills in the injury prevention workforce.
- Increase the use of evidence-based injury prevention interventions statewide.
- Improve public support for injury prevention.
- Increase resources for injury prevention.

Characteristics of an Injury Free Louisiana:
- Approximately 4,000 Louisianans will be able to live productive lives, because they will not die as a result of injuries.
- Families will not experience the stress of dealing with hospitalization, recovery, and the related financial burden.
- Elder Louisianans will be able to live independently longer, because they will not be incapacitated or hospitalized due to falls.
- Highways, streets, and sidewalks will be safer places for people to travel.
- Approximately 512 Louisianans will not die from unintentional poisoning.

Section I: Introduction to the Louisiana Injury Prevention Plan (LIPP)

Development of the Louisiana's Injury Prevention Plan:

In July of 2006, the Louisiana Department of Health and Hospitals (DHH), Office of Public Health (OPH) entered into a Cooperative Agreement with the Centers for Disease Control and Prevention (CDC) to collect and analyze data relative to selected causes of injury. The primary goal of the agreement is to reduce the number of persons injured and dying from intentional and unintentional injuries in the State of Louisiana. This is to be accomplished by the development of a statewide plan for the surveillance and prevention of injuries in Louisiana.

The State and Territorial Injury Prevention Director's Association (STIPDA) determined that the burden of injuries and developing a plan of action as the first steps in the public health approach to injury prevention. STIPDA recommends that in order to have an effective injury prevention state system, the following core components must be created and sustained:

- Collecting and Analyzing Injury Data
- Designing, Implementing and Evaluating Interventions
- Building a Solid Infrastructure for Injury Prevention
- Providing Technical Support and Training
- Affecting Public Policy.

To develop the Plan, it was necessary for the Injury Research and Prevention Program (IRP) to collaborate with agencies, groups, and key stake holders that have expertise in a wide variety of injury and violence-related topics and research areas. In December 2007, a statewide meeting was held to bring together the injury prevention community to discuss how to reduce the burden of injuries in Louisiana. Approximately 50 persons representing diverse backgrounds received information about the Injury Research and Prevention Program, the magnitude of the Injury Problem in Louisiana and the need for a comprehensive state injury plan. In order to form the Injury Community Planning Group (ICPG) and supporting committees, attendees were asked to complete a survey and to choose one of the following committees; Data Committee, Prevention and Intervention and Training and Technical Assistance Committee and Infrastructure and Public Policy Committee. The purpose, role, and structure of each committee were also explained and future meeting dates were established. After the ICPG determined the state's injury priorities, the IRP met individually with the affected stakeholders to help determine the goals, objectives, and strategies for the injury priorities. In April 2009, a draft of the 2008-2010 Louisiana Injury Prevention Plan was made available for all stakeholders to review and to make comments. As a result of the comments revisions were made and the final injury plan was ready for dissemination in May 2009.

The Louisiana Injury Prevention Plan (LIPP) should be considered as a starting point and be used in further planning sessions with stakeholders to refine measurable goals and objectives with timeframes and priority strategies. This plan will be revisited regularly as additional information becomes available from existing and future data sources.

The Louisiana Injury Prevention Plan offers recommendations to build the core capacity of the Injury Research and Prevention System. These recommendations must be addressed in order to reach our full potential in preventing injuries in Louisiana.

Challenges:

The Injury Research and Prevention Program were met with numerous challenges in the process of developing the Plan. One of the major challenges, at the inception of the project, was related to the IRP program's infrastructure. The program faced several staff vacancies as a result of Hurricanes Katrina and Rita, specifically the Program Manager and Injury Prevention Coordinator. The following challenges were also identified:

- Key decision makers and the general public are unaware of the magnitude of the injury problem in Louisiana and of The Injury Research and Prevention Program.
- The survival of injury prevention programs are threatened by uncertain funding and support.
- Delays in receiving timely data.
- The inability to get a wide range of external partners interested in injury prevention.
- Few professionals are trained in injury epidemiology and injury prevention.
- Safety has a poor public image; our society glorifies risk taking.
- There are numerous injuries that result in death and disability; selection of priorities to focus efforts can be exhaustive.
- Environmental disruptions, i.e. hurricanes.

Common Themes and Core Recommendations:

There are a number of common themes and core injury system needs that must be addressed in order to reach the states vision of ***"Creating an Injury Free Louisiana."*** These include:

- Development of long-term public and private funding sources that will support and sustain the Injury Research and Prevention System.
- Establishment and/or expansion of relationships with relevant DHH programs and other state and external agencies to enhance collaborative efforts.
- Improvements in data collection efforts and analysis to enhance our ability to obtain and provide critical data in a timely manner.
- Improvements in the dissemination of data to DHH programs, external agencies, organizations, key decision makers and the public.
- Enhance the knowledge and skills in the injury prevention workforce.
- Increase the use of evidence-based injury prevention interventions statewide.
- Development of a public information strategy to improve public support for injury prevention and to raise awareness of the impact and prevention of injuries in Louisiana.

State Injury Priorities:

The Louisiana Injury Prevention Plan not only addresses the above themes but identifies three injury priority areas as determined by our data analysis and the recommendations of the Injury Community Planning Group (ICPG). These three priority areas are Falls Among the Elderly and Children, Poisoning, and Motor Vehicle Traffic - Teen Driving and Distracted Driving.

State Specific Population Priorities:

The Louisiana Injury Prevention Plan also addresses Traumatic Brain Injury (TBI), Sexual Violence and Teen Dating Violence.

Section II: Injury as a Public Health Issue
Overview of Injury in Louisiana – Defining the Problem

As previously stated, injury is a major public health problem in both the United States and Louisiana. In 2004, unintentional injuries were the 4th leading cause of death in Louisiana and claimed approximately 4,000 lives.[1] Specifically, injury was the leading cause of death for people ages 1-44. Nevertheless, the nation's and this state's current investment in injury prevention programs and research is not commensurate with the magnitude of the problem.

Despite mounting evidence that almost all injuries are preventable, injury prevention remains one of public health's most costly, tragic and under-recognized problems. The health of Louisianans is compromised each year by the impact of injuries. Not only are injuries a leading cause of death and disability in both the United States and Louisiana, they also result in physical and emotional suffering and are costly in terms of medical care expenditures, lost income and lost productivity. **A cost analysis study in Louisiana (2004) estimated injury deaths to cost $26 million on medical care treatment costs and $6 billion on quality of life lost for fatal injuries.[2]**

To prevent injuries it is imperative that we first understand their causes. Public perception views injuries as random acts of fate or something out of their control. Often times car crashes, fires, drownings, homicides, and falls are often explained as bad luck and being in the wrong place at the wrong time. Injury is defined as any unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical or chemical energy that exceeds a threshold of tolerance in the body or from the absence of such essentials as heat or oxygen.

Unintentional injuries include, but are not limited to, injuries that result from motor vehicle crashes, falls, fires, poisonings, drowning, suffocations, choking, animal bites, recreational and sports-related activities. Intentional injuries result from interpersonal or self-inflicted violence, and include homicide, assaults, suicide and suicide attempts, child abuse and neglect, intimate partner violence, and sexual assault.

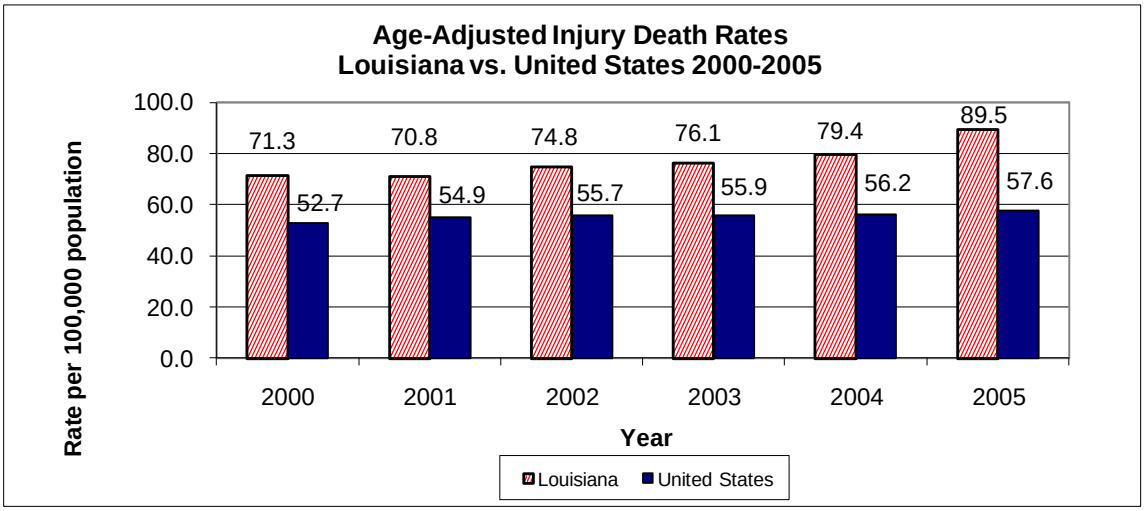
Making an impact on injuries is not an easy task and is not simply a matter of providing information to people and expecting them to change immediately. We can prevent these injuries through a combination of education, changes in people's environment, product modifications, and laws to change behaviors and minimize risk factors.

Therefore, the Louisiana Injury Prevention Plan emphasizes the strengthening of the state's capacity in five primary areas including data, infrastructure, technical assistance and training, prevention and interventions, and public policy.

Louisiana vs. United States, 2000 - 2005
Age-Adjusted Injury Death Rates by Year

	Age-Adjusted Rate	
Year	**Louisiana**	**United States**
2000	71.3	52.7
2001	70.8	54.9
2002	74.8	55.7
2003	76.1	55.9
2004	79.4	56.2
2005	89.5*	57.6

* Age adjusted rates/100,000 calculated using 2000 US Census Population
Source: "United States Rates" – CDC National Center of Health Statistics (WISQARS)



Top 10 Leading of Causes of Death in Louisiana – 2004

Rank	Cause of Death
1	Heart Disease
2	Malignant Neoplasms
3	Cerebrovascular
4	**Unintentional Injury**
5	Diabetes Melllitus
6	Chronic Low Respiratory Disease
7	Alzheimer's Disease
8	Nephritis
9	Influenza & Pneumonia
10	Septicemia

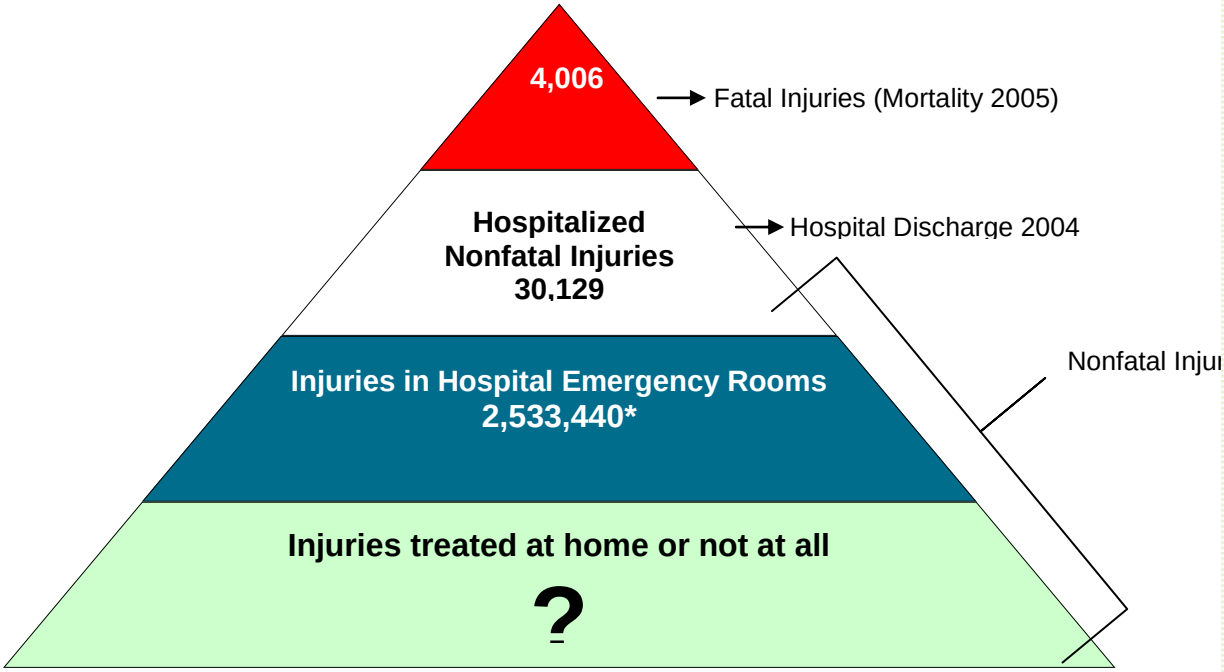
Source: Office of Public Health, Center of Vital Records and Health Statistics

Louisiana Injury Facts - 2005

A Major Public Health Problem

- 4,006 Louisianans died as a result of an injury, of which there were:
  2,829 unintentional (accidental) deaths,
  489 suicides, and
  562 homicides
- Injuries accounted for 1 of every 10 deaths in Louisiana.
- Injuries are the leading cause of death and lifelong disability among persons 1-44 years of age in Louisiana.
- Injuries account for more premature deaths before 65 years of age than cancer, heart disease, stroke, and diabetes combined.
- Louisiana's death rates due to motor vehicle crashes are higher than the national average.
- Louisiana's death rates due to poisonings are higher than the national average.
- Louisiana's death rates due to firearms are higher than the national average.
- More than 350 children 1-19 years of age died in Louisiana from an injury.
  - Injuries accounted for 50% of all deaths for children 1-14 years of age.
  - Injuries accounted for 76% of all deaths among adolescents 15-19 years of age.

Injury Pyramid



* **Number is an estimate [Based on mortality data, 2000, 1 - 44 years]**

The Injury Pyramids provides a visual representation of the number of injuries, illustrating both fatal and nonfatal injuries. In 2005, 4,006 Louisianans died as a result of an injury. The next step in the pyramid after fatal injury deaths is the nonfatal hospital inpatient injury discharges (morbidity data). This is more indicative of the extent of the injury problem than death data alone. Also in 2004, 30,129 Louisiana residents were hospitalized and an even greater number were seen in Emergency rooms. These deaths and hospitalizations only reflect a small portion of the much larger toll that injuries are costing the state of Louisiana. Although information on these injuries is often not readily available, it is important to consider these data sources when investigating and addressing the scope of the problem.

Louisiana 2005 - Fatal Injuries
Top 6 Leading Causes of Injury Fatalities by Intent and Age Group

Rank	Age Groups									
	0-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Unintentional Suffocation 19	Unintentional MV Traffic 12	Unintentional MV Traffic 15	Unintentional MV Traffic 222	Unintentional MV Traffic 176	Unintentional Poisoning 143	Unintentional MV Traffic 134	Unintentional MV Traffic 102	Unintentional Natural/Environment 392	1Unintentional MV Traffic 900
2	Unintentional Fire/Flame 15	Unintentional Drowning 5	Unintentional Fire/Flame 7	Homicide Firearm 166	Homicide Firearm 142	Unintentional MV Traffic 140	Unintentional Poisoning 107	Unintentional Natural/Environment 88	Tied2	Unintentional Natural/Environment 618
3	Unintentional MV Traffic 13	**	Tied1	Unintentional Poisoning 81	Unintentional Poisoning 121	Homicide Firearm 60	Unintentional Natural/Environment 81	Suicide Firearm 39	Unintentional MV Traffic 86	Unintentional Poisoning 512
4	Unintentional Drowning 12	**	**	Suicide Firearm 67	Suicide Firearm 57	Suicide Firearm 56	Suicide Firearm 68	Unintentional Poisoning 37	Unintentional Suffocation 62	Homicide Firearm 433
5	Unintentional Other Pedestrian 6	**	**	Suicide Suffocation 15	Undetermined Poisoning 25	Undetermined Poisoning 26	Homicide Firearm 37	Homicide Firearm 16	Suicide Firearm 54	Suicide Firearm 341
6	**	**	**	Undetermined Poisoning 11	Suicide Suffocation 23	Unintentional Natural/Environment 25	Undetermined Poisoning 26	Unintentional Fall 13	Unintentional Fire/Flame 24	Unintentional Fall 161

Tied1: Unintentional Drowning and Unintentional Natural/Environment (5); **Tied2**: Unintentional Fall and Unintentional Not Specified (112)
** Count less than 5

Injury Facts:

- In 2005, 4,006 Louisianans died as a result of an injury, of which there were 2,829 unintentional (accidental) deaths, 489 suicides, and 562 homicides
- In 2005, injuries accounted for 1 of every 10 deaths in Louisiana.
- Injuries are the leading cause of death and lifelong disability among persons 1-44 years of age in Louisiana.
- Injuries account for more premature deaths before 65 years of age than cancer, heart disease, stroke, and diabetes combined.
- Louisiana's death rates due to motor vehicle crashes are higher than the national average.
- Louisiana's death rates due to poisonings are higher than the national average.
- Louisiana's death rates due to firearms are higher than the national average.
- More than 350 children 1-19 years of age died in Louisiana from an injury; injuries account for 50% of all deaths to children 1-14 years of age and 76% of all deaths among adolescents 15-19 years of age.

Louisiana 2005

Injury Deaths by Cause/Mechanism

Cause	*Number*	*Percent (%)*	*Crude Rate**	*Age-Adjusted Rate***
MV Traffic	900	22.5	20.0	19.8
Firearm	825	20.6	18.3	18.1
Poisonings	651	16.3	14.4	14.7
Natural/Environmental	618	15.4	13.7	14.0
Suffocation	220	5.5	4.9	3.8
Fall	164	4.1	3.6	3.8
Not Specified	163	4.1	3.6	3.7
Fire/Flame	117	2.9	2.6	2.6
Drowning	88	2.2	2.0	1.9
Cut/Pierce	71	1.8	1.6	1.6
Other Transport	40	1.0	0.9	0.9
Other Specified	32	0.8	0.7	0.7
Other Specified nec	30	0.7	0.7	0.6
Other Land Transport	29	0.7	0.6	0.6
Other Pedestrian	20	0.5	0.4	0.5
Struck by/Against	18	0.4	0.4	0.4
Machinery	13	0.3	0.3	0.3
Other Pedal Cyclist	4	0.1	0.1	0.1
Hot Object/Scald	3	0.1	0.1	0.1
Total	**4,006**	**100.0**	**88.9**	**89.5**

*Rate per 100,000 calculated using 2005 US Census Population Estimates
** Age adjusted rates/100,000 calculated using 2000 US Census Population

Louisiana 2004 - Non Fatal Injuries
Top 3 Leading Causes of Non Fatal Injury Hospital Discharges

Rank	Mechanism/Cause	Total Number	Discharge Rate/100,000	Age Adjusted Rate*
1	Unintentional Falls	9,619	214.0	224.2
2	Unintentional MVT Occupant	2,174	48.4	48.0
3	Self-inflicted Poisonings	1,910	45.8	42.5

**** Age adjusted rates per 100,000 calculated using US 2000 Census population***

Injury Facts:

- In 2004, there were 30,129 non-fatal injury related hospital discharges
- Falls were the highest cause (36%) of a nonfatal injury hospital discharges followed by Poisonings (14.4%) and MVT Occupant Crashes (8.1%).
- Rate of nonfatal injury hospital discharges in 2004 were the highest in Tensas parish (1,366.5/100,000). The other parishes that had relatively high rates were Evangeline (1,210.6/100,000) and St. Bernard (1202.4/100,000).
- The highest rate of nonfatal injury related hospital discharges in 2004, were primarily among the elderly population aged 65+ years.
- Females above age 65 were more likely to be hospitalized than males, who in turn observed much higher rates of nonfatal injuries among other age groups.

Louisiana 2004
Nonfatal Injury related Hospital Discharges by Cause (All Intents)

Cause/Mechanism	*Total (n)* *(All Intents)*	*Percent (%)*
Cut/Pierce	935	3.5
Drowning/submersion	30	0.1
Fall	9,637	36.0
Fire/Flame	183	0.7
Hot object/substance	256	1.0
Firearm	530	2.0
Machinery	141	0.5
MVT Occupant	2,174	8.1
MVT Motorcyclist	334	1.2
MVT Pedal cyclist	89	0.3
MVT Pedestrian	282	1.1
MVT Unspecified	396	1.5
MVT Other	17	0.1
Pedal cyclist, other	146	0.5
Pedestrian, other	28	0.1
Transport	498	1.9
Bites and Stings	936	3.5
Other natural/environment	283	1.1
Overexertion	366	1.4
Poisoning	3,858	14.4
Struck by, against	1,137	4.2
Suffocation	130	0.5
Other specified and classifiable	1,733	6.5
Other specified not elsewhere classifiable	817	3.0
Unspecified	1,858	6.9
Missing	3,332	
Total	**30,129**	**100.0**

Section III: Improving the State Injury System
Core Injury System Priorities

The Louisiana Injury Prevention Plan emphasizes the strengthening of the state's capacity in five primary areas including data, infrastructure, technical assistance and training, prevention and interventions, and public policy.

Goal 1: Build a Comprehensive Infrastructure for Injury Prevention

Statement of the Problem:
While there are many potential sources of funding for injury prevention initiatives, funding must be consistent and stable in order to sustain a broad-based injury prevention effort. This stabability of funding will help to reduce the burden of injury by providing focus and direction for the many aspects of an effective system while making the best use of the limited resources.

Recommendations:

Objective 1: Raise awareness of the prevention of injuries in Louisiana by 10% annually.

Strategy 1: Increase the dissemination of injury information to stakeholders, policy makers, and the public.

1. Create Injury-Specific Fact Sheets
2. Contribute to the DHH and/or stakeholder's newsletters information on an injury related topic
3. Produce an annual injury brief
4. Produce comprehensive injury mortality, morbidity and/or injury specific reports annually
5. Identify various marketing strategies or mediums to target specific audiences at the state and regional/local level
6. Conduct injury related marketing events in collaboration with various partners such as Safe Kids, EMSC, Councils on Aging, Poison Control Center, etc., to raise awareness of injury prevention
7. Market the Louisiana Injury Prevention Plan

Strategy 2: Expand the injury prevention website to include current injury related data and resources.

1. Develop and maintain a Statewide Injury Directory and Resource Guide
2. Develop and maintain an annual Statewide Injury Calendar of Events
3. Revise the website to become more user-friendly and accessible to the public

Objective 2: Strengthen the capacity of the Injury Prevention System at the State and Local level to reduce and prevent injuries and effectively address injury prevention priorities by 10% annually

Strategy 1: Assess the capacity of state agencies and state organizations involved in injury prevention for identification of injury prevention activities, programs and evaluation methods.

Strategy 2: Assess the capacity of local health departments and local organizations involved in injury prevention for identification of injury prevention activities, programs and evaluation methods.

Strategy 3: Establish a sustainable infrastructure at the state and regional levels to provide leadership for injury prevention.

1. Establish the Office of Public Health Injury Research and Prevention Program as the lead office with responsibility for statewide injury prevention leadership, collaboration and coordination.
2. Expand staff to improve injury coordination for programs and initiatives at the state level.
3. Expand regional staff to coordinator injury prevention programs and initiatives at a regional or local level.

Objective 3: Improve coordination and collaboration among state agencies/departments and community partners to reduce and prevent injuries by 10% annually

Strategy: Encourage statewide and community partners to work collaboratively to reduce and prevent injuries and continue collaborative efforts that support injury prevention programs and expand prevention initiatives.

1. Establish and/or expand relationships with DHH departments to integrate injury prevention in existing department.
2. Establish and/or expand relationships with OPH Centers and Programs to integrate injury prevention in existing programs.
3. Establish and/or expand relationships with other state agencies to integrate injury prevention in existing programs.
4. Establish and/or expand relationships with community partners to integrate injury prevention in existing programs.

Goal 2: Improve Data-Collection, Analysis and Dissemination

Statement of the Problem: The lack of integrated statewide injury surveillance impedes our ability to adequately describe and respond to the injury problem in Louisiana. Most of the injury databases exist in isolation and are housed and controlled by separate agencies and are not linked to other sources of data.

Recommendations:

Objective 1: Increase the quality and accessibility of existing data sources and create new data sources to improve surveillance, planning and evaluation by 10% annually.

Strategy 1: Identify statewide data sources and coordinate the development of a comprehensive injury surveillance system.

1. Coordinate with the ICPG Data Committee to identify all injury data sources at the state, regional and local level and assess strengths and limitations
2. Create a guide on injury data sources in Louisiana
3. Create a database to record the number of data requests received by the IRP surveillance program

Strategy 2: Disseminate data and injury reports annually

1. Coordinate with external and internal injury partners to determine the best methodology to analyze and produce injury reports
2. Disseminate injury reports to the public and stakeholders specifically related to the priority injuries
3. Partner with OPH/MIS to develop an interactive web-based injury query and reporting system called the Louisiana Injury Reporting System (LIRS)

Strategy 3: Enhance existing injury surveillance systems

1. Partner with OPH/Vital Statistics Section and parish coroners to improve the completeness of death certificates related to all injuries
2. Partner with the State's Healthcare Data Clearinghouse to improve the collection of external cause of injury codes (E-Codes) in Louisiana Hospital Impatient discharge database

Strategy 4: Advocate for the collection of injury data from new data sources

1. Partner with Office of Public Health, Health Statistics for the collection of Emergency Department data as a source of information for statewide injury morbidity
2. Partner with Bureau of Emergency Services to initiate the development of a patient level EMS data reporting system
3. Partner with parish coroners and parish sheriffs/police chiefs, Louisiana Coalition Against Domestic Violence, Louisiana Commission on Law Enforcements, Office of Mental Health for the collection of violent death, suicide and domestic violence data

4. Partner with Bureau of Primary Care to improve injury related questions on the statewide Behavioral Risk Factor Surveillance Survey (BRFSS)
5. Partner with the Department of Education to improve injury related questions on the Youth Risk Behavioral Surveillance Survey (YRBSS)
6. Partner with Louisiana Foundation Against Sexual Assault (LaFASA) to improve collection of state-specific sexual violence data

Goal 3: Enhance Technical Support and Training

Statement of the Problem: Injuries are costly and injury prevention saves lives and money. While there are numerous statewide and local prevention and intervention efforts, each targets the various injury problems from different perspectives. In addition, few professionals are trained in injury epidemiology and injury prevention. Therefore, improved statewide coordination of injury prevention and intervention efforts and training in injury epidemiology and prevention would benefit all Louisianans

Recommendations:

Objective 1: Increase the use of evidence-based injury prevention interventions statewide by 10% annually.

Strategy 1: Compile existing evidence-based, "best practices" in research literature to promote successful injury prevention strategies

1. Identify results of evidence based intervention research
2. Post results to IRP website and disseminate the results of evidence-based intervention research to providers and stakeholders

Objective 2: Enhance the knowledge and skills in the injury prevention workforce by 10% annually

Strategy 1: Collaborate with state and community partners to develop and/or provide injury prevention training and education programs for the injury prevention workforce

1. Assess the availability of injury prevention training opportunities
2. Conduct and annual Injury Conference/Symposium
3. Develop and "Injury Prevention 101" curriculum
4. Develop specific injury prevention training and education programs

Goal 4: Affect Public Policy

Statement of the Problem: Decision makers often time are unaware of the magnitude of the injury problem in comparison with other health problems.

Recommendations:

Objective 1: Improve public support for injury prevention by 10% annually.

Strategy 1: Establish a sustainable infrastructure to coordinate, monitor, and evaluate the Louisiana Injury Prevention Plan (LIPP) implementation.

1. Assess existing injury related councils and coordinate injury efforts
2. Establish an official multidisciplinary Injury Prevention Advisory Council through legislation to provide ongoing advice to the State on the LIPP implementation and educate stakeholders and legislators on the legislation

Strategy 2: Identify and plan collaborative statewide opportunities to increase support for injury prevention initiatives through the policy making process.

1. Assess current policies and legislation related to injury prevention
2. Educate stakeholders and legislators by providing injury information to assist with injury related legislation including the development of injury briefs and fact sheets
3. Propose and/or revise policies and legislation that support the prevention or reduction of injuries
4. ICPG partners will advocate and support specific injury prevention related legislation
5. Increase injury prevention professionals' involvement in the policy-making process as advocates including legislators and media representatives for injury prevention

Strategy 3: Increase resources for injury prevention

1. Complete an inventory of all known resources for injury prevention
2. Identify non-traditional partners for injury prevention

Strategy 4: Establish partnerships with funders at a federal and state level and foundation to enhance injury prevention activities.

1. Establish relationships with federal and state funders to indentify funding opportunities for injury prevention
2. Meet with state foundations to discuss funding opportunities for injury prevention

Strategy 5: Develop long-term public and private funding sources, including creative approaches to support statewide and local prevention activities.

1. Compile a list of create revenue streams that are long term and recurring for specific injury prevention programs or initiatives
2. Meet with DHH/OPHH officials to discuss state funding to support injury prevention activities of the LIPP

Section IV: Preventing Injuries in Louisiana
State Specific Injury Priorities

In addition to the core system injury priorities, the Injury Community Planning Group recommended state specific injury priorities to include in the Louisiana Injury Prevention Plan. These populations were selected based on the analysis of the state data as well as national supported injury priorities.

The State Specific Injury Priorities are:

- Motor Vehicle – specifically Teen Driving, Distracted Driving, and Tweens
- Falls among Older Adults and Children
- Poisoning

Motor Vehicle Goal: Reduce motor vehicle related deaths and injuries

Statement of the Problem: Analysis of Louisiana's 2000-2005 cumulative mortality and 2004 non-fatal hospital discharged data indicates that motor vehicle traffic (MTV) crashes continue to be the leading cause on unintentional injury deaths (42%) and the second leading cause on unintentional injury hospitalizations (16%) for all Louisianans.[3]

Objective 1: Reduce motor vehicle related deaths and injuries by 1.54 per 100M VMT by 2010.

Strategy 1: Increase awareness and knowledge of safe driving to teen drivers

1. Collaborate with State Police to expand prevention training at all schools
2. Collaborate with the Attorney General Office Teen Victims Prevention Program to expand prevention efforts
3. Collaborate with Insurance Companies to expand prevention efforts directed to teen driving
4. Collaborate with state and local task forces or coalitions to expand prevention efforts

Strategy 2: Increase awareness and knowledge of the affects of distracted drivers.

1. Collaborate with Highway Safety on distracted drivers legislation

Strategy 3: Increase awareness and knowledge of seatbelt usage among Tweens

1. Collaborate with Maternal and Child Health to promote Tween safety by disseminating education materials related to Tweens

Strategy 4: Increase the quality and accessibility of motor vehicle related data for the purpose of surveillance, planning and evaluation

1. Design an observational study at the state and regional level that includes a survey on distracted driving and tween seat belt usage to identify risk factors

Falls among Older Adults Goal: Reduce fall hospitalizations and deaths among older adults

Statement of the Problem: Falls and fall-related injuries impose an enormous burden on individuals, society and the state's health care system. The injuries received from a fall can result in Death, disability, nursing-home admission and medical costs are the leading cause of injury hospitalization in Louisiana. Each year, approximately 9,600 Louisianans are hospitalized for fall-related injuries, accounting for 36 percent of all injury hospitalizations.[4] In 2004, the median hospitalization cost for a fall injury was $18,972 and the total charges associated with inpatient stay due to falls was $169,626,6624.[4] In addition, 150 Louisianans die as a result of a fall injury annually.[4]

Objective: Reduce fall hospitalizations and deaths among older adults by 2% annually through risk factor reduction initiatives

Strategy 1: Improve the management of health conditions that place older adults at increased risk of falls and resulting injuries by increasing awareness of adverse effects of some medications.

1. Develop or enhance public education materials and social marketing campaigns focused on falls risks association with medication
2. Collaborate with healthcare providers such as Physicians, Pharmacists and Optometrists to support the development and dissemination of educational materials and trainings for older adults such as:
    a. Proper disposal of medications
    b. Building communicative relationships with healthcare providers and family members for medications management
    c. Drug interaction education
    d. Fall risks
3. Increase the numbers of older adults who have medication review conducted by a healthcare provider or pharmacist to include a focus on fall-related prevention

Strategy 2: Increase awareness and knowledge of fall risk and protective factors related to physical conditioning of older adults

1. Collaborate with existing agencies, healthcare providers, businesses, universities, insurance companies, and other educational programs working in the areas of health and safety to promote regular exercise and skill training to reduce falls and resulting injuries.
2. Increase the availability of appropriate physical mobility programs and services for older adults
3. Partner with the Governor's Office of Elderly Affairs, Council on Aging and Office of Aging and Adult Services to promote exercise programs for older adults

Strategy 3: Increase awareness and knowledge of home safety measures that reduce home hazards to lower the risk of falls and resulting injuries

1. Develop or enhance public education materials and social marketing campaigns focused on reduction of safety hazards in the home
2. Enhance funding sources and community-based resources to assist older adults in accessing home assessments and making appropriate modifications such as:
    a. Placement of electrical cords and plugs
    b. Bathroom safety
    c. Secure flooring – rugs, slippery surfaces

Falls in Children Goal: Reduce falls and resulting injuries to children

Statement of the Problem: Falls are the leading cause of injury related hospitalizations for children 14 and under, accounting for nearly 20% of injury related admissions in Louisiana[5]. On average 2 Louisiana children ages 0-14 years of age die as a result of a fall and nearly 422 children are hospitalized each year for a fall related injury[5]. In 2004, the median hospitalization cost for a fall injury among children was $5,684 and the total charges associated with inpatient stay due to falls were $4,509,485[5].

Objective: Reduce falls and resulting injuries to children by 2% annually

Strategy 1: Increase awareness and knowledge to reduce falls among children

1. Develop or enhance public education materials and social marketing campaigns focused on fall safety for children
2. Partner with the OPH, MCH Safety Coordinators to distribute safety information to schools, childcare centers and communities to:
    a. Establish a schedule for regular inspection and maintenance of playground equipment to provide instruction to children on playground safety
    b. Encourage environmental assessments in homes and childcare centers
    c. Encourage safe sleep environments in homes and childcare centers

Poisoning Goal: Reduce poisoning deaths and hospitalizations

Statement of the Problem: Poisonings are the second leading cause of injury hospitalizations in Louisiana and the third leading cause of all injury deaths. Each year, approximately 3,800 Louisianans are hospitalized for poisoning and approximately 450 die. Poisonings account for about 14% of all injury hospitalizations and deaths.

Objective: Reduce poisoning deaths and hospitalization by 10% annually

Strategy 1: Increase awareness and knowledge of risks and exposure to poisoning

1. Partner with the Poison Control Center (PCC) to enhance awareness and poison prevention activities
2. Partner with Office of Mental Health, Louisiana Partnership for Youth Suicide Prevention to reduce poisoning related to suicides
3. Develop or enhance public education materials and social marketing campaigns focused on poison prevention specifically during poison control week
4. Expand the dissemination of public education materials and trainings to healthcare providers and the public on poison prevention

Section IV: Preventing Injuries in Louisiana
State Specific Populations Priorities

The Injury Community Planning Group recommended additional state population priority areas to be included in the Louisiana Injury Prevention Plan which are Traumatic Brain Injuries (TBI) Sexual Violence and Teen Dating Violence related injuries. Although the ICPG identified these populations as priority areas, it also recommended convening targeted task forces to effectively identify specific goals, objectives and strategies to address these populations. These recommendations will be added to the plan in the future.

Traumatic Brain Injury

Statement of the Problem: Traumatic Brain Injury (TBI) is one of the leading causes of death and disability of children and young adults in the United States and Louisiana. An estimated 5.3 million individuals, approximately 2% of the United States' population are living with a disability resulting from a TBI.[1] Traumatic brain injuries have a deep impact on communities throughout the United States. In addition, these non-fatal traumatic brain and spinal cord injuries represent a major economic burden to society. The estimated annual cost of traumatic brain injuries in the United States is over $224 billion.[1]

An analysis of 2000-2005 Louisiana mortality data indicates that 5,596 individuals died as a result of a TBI. Several thousand more individuals will not recognize that they have sustained a preventable injury (as in closed head trauma from sports or falls) capable of causing long-term deficits. TBIs can have a deep impact on families and communities and are resource-intensive, both financially and emotionally.

In 2005, firearm related deaths were the leading cause of TBI deaths, followed by motor-vehicle crashes and falls. Analyzing TBI deaths by age group allows for the development of targeted interventions in sub-populations. Motor-vehicle crashes were the leading cause of injury among youth from birth to 24 years of age. Fall-related TBIs, in turn, were the leading cause of injury among persons aged 75 and older.

TBIs can be markers of inadequate prevention policies, correctable environmental hazards (e.g., uneven sidewalks that precipitate falls), and other injury-prevention opportunities. Alcohol-impaired driving, unsafe boating, unsafe bicycling, and violence can be assessed separately. Pedestrian injuries may be linked to poor signage, alcohol use, poor outdoor lighting, and unsafe pedestrian paths. Falls may be linked to home safety, work safety, playground safety, and other environmental obstacles. Violence injuries may be linked to gun use, aggression, alcohol use, and child abuse. These examples show how programs not particularly aimed at reducing brain injuries may use the same data to plan and evaluate prevention and intervention strategies.

The majority of TBIs are preventable. That fact, coupled with the seriousness and prevalence of their occurrence, makes TBIs a public health concern. Therefore, the Louisiana State Legislature has established the Traumatic Brain and Spinal Cord Injury Registry and has mandated the reporting of these events since 1990.

Sexual Violence

Statement of the Problem: Sexual assault is a societal issue and not just a concern of the individual survivors and their families. The National Institute of Justice estimates that rape and other sexual assault annually cost $127 billion or about $508 per U.S. resident. It cost Louisiana over $2.2 million annually. In 2005, the Bureau of Justices Statistics identified, 188,960 incidents of rape and sexual assault.

Researches estimate that one out of every three American women will be sexually assaulted in their lifetime. As many as one in four girls and one in six boys will be sexually assaulted before the age of 18. In 2003, in the Violence Against Women Prevention Research Study, "Rape in Louisiana: A Report to the State, an estimated over one in eight Louisiana women will be raped during their lifetime. Of women who have ever been raped, two thirds were raped before their 18th birthday, one third before the age of 12.

Currently, the Louisiana's Injury Research & Prevention (IRP) Program's violence section is working toward ending sexual violence through education and awareness. The IRP Program provides resources to the Louisiana Foundation Against Sexual Assault (LaFASA) and community-based sexual assault centers to support these efforts. LaFASA is a statewide coalition who provides direction, technical assistance and training to Louisiana's sexual assault centers. The Sexual Assault Centers provide counseling, advocacy, and link clients to services such as family counseling, emergency medical services, housing, legal advocacy, behavioral health interventions, etc.

The IRP works in collaboration with LaFASA. This collaboration has implemented media campaigns, hosted national speakers and provided training to stakeholders. In addition, this partnership has established a Sexual Violence Primary Prevention Committee (SVPPC). The SVPPC group is comprised of various stakeholders. The mission of SVPPC is to develop a comprehensive five-year plan for the primary prevention of sexual violence in Louisiana.

One of Louisiana's primary strategies to end sexual violence is to increase the number of professionals informed and educated on sexual violence prevention by teaching them the methods and importance of sexual violence primary prevention. Another strategy is to increase awareness of sexual violence prevention through education. Educating Louisiana's youth in schools is an excellent method for reaching them at impressionable ages and reaching them in mass quantities. Repetition of the sexual violence prevention messages at all stages of education, allows Louisiana the opportunity to change social norms in the future.

The only way the end sexual violence is to prevent it from occurring. Ending sexual violence is everyone's responsibility. Therefore, Louisiana's approach to prevention is through education and awareness.

Teen Dating Violence

Statement of the Problem: Teen dating violence is defined as a pattern of controlling behavior by one teenager over another teenager who is in a dating relationship. This behavior can include physical abuse, emotional and verbal abuse, sexual abuse, threats, isolation, and harassment.

According to the Center for Disease Control and Prevention (CDC), each year 1 in 11 adolescent reports being a victim of physical dating violence. In the Safe Dates Project, 1 in 4 adolescents reported verbal, physical, emotional, or sexual violence each year.

There are various marketing campaigns and programs that currently exist nationally to address teen dating violence and healthy relationships such as “Choose Respect”, “Safe Dates”, and Love is not Abuse. Although these programs have been effective reaching some teens, violence among teenagers continues to rise.

In Louisiana, there are various organizations working on teen related issues to help reduce teen violence. For example, the Teen Center for Non-Violence is a community safe haven for in the Greater New Orleans area teenagers. This facility is part of the campaign to “Rebuild a Teen-Friendly Greater New Orleans” and is an effort to prevent teen violence, suicide, educational failure and homicide in the community. In the River Parishes, Girls in Action is an organization committed to increasing motivation and self-esteem in girls in various communities through networking and improving educational skills and work ethic.

In addition, Louisiana has developed a curriculum, “Care-ageous Kids” that emphasis healthy relationships and is in the process of being implemented and evaluated statewide. Although the target audience is for 4th and 5th graders, this curriculum is intended to help build skills for healthy relationships. Louisiana is also developing a curriculum targeted to 6th-8th graders. In addition, each local Sexual Assault Centers (SACs) will receive training on Safe Dates which will be incorporated in training activities provided to schools and youth organizations.

Data collection for teen dating violence is limited. Although some data is available through surveys administered by the Louisiana Department of Education such as the Youth Risk Behavioral Survey and the Office of Addictive Disorders’ Louisiana Youth Caring Communities Survey, the information collected does not focus specifically on the issue of teen dating violence.

Adolescents in abusive relationships are at risk for health problems such as an increase risk for injuries and alcohol and drug abuse. Many of these cases of teen dating violence can be prevented by helping adolescents develop skills for healthy relationships with others.

Section V: Appendices

Appendix A: Acknowledgements

- ICPG Members & Partners

Appendix B: Abbreviations/Definition of Terms

Appendix C: References

Appendix D: Injury Data Reports

- Motor Vehicles Traffic
- Falls among Older Adults and Children
- Poisoning

Injury Community Planning (ICPG) Members & Partners

Karen Ahmad
Safety Council

Jamie Ainsworth
Louisiana Highway Safety Commission

Ken Alexander
The Louisiana Hospital Association

Kristie Bardell
SIDS Risk Reduction Coordinator

Wayne Barnes
Metropolitan Center for Women and Children

Scott Benton
Children's Hospital

Jay Bulot
Governor's Office of Elderly Affairs

Shirley Burton
Office of Public Health, Epidemiologist

Dr William Clark, Medical Director
Bureau of Emergency Medical Services

Takeisha Davis, Medical Director
Office of Public Health, Region 1

Jennifer Dickherber
Maternal Child Health, Child Death Review Coordinator

Jeanne LeVelle
Office of Aging and Adult Services

Dr. B. J. Foch, Medical Director
Office of Public Health, Region 5

Katherine Fontenette
OPH, MCH, Child Safety Coordinator

Devin George
Office of Public Health, State Vital Records Registrar

Jimmy Guidry
Department of Health & Hospitals, State Health Officer

Cara Bozeman
OPH, MCH, Child Safety Coordinator

Debbie Huffman
Bureau of Emergency Medical Services, EMSC

Brian Jakes, Sr.
Southeast Area Health Education Center

Adrienne Katner
Office of Public Health, Epidemiology and Toxicology

Pamela Kreyling
Office of Public Health, Epidemiologist

Michelle Lackovic
Environmental Epidemiology and Toxicology

Joseph Hicks
Office of Aging and Adult Services

Gina Lagarde
OPH, Child Health Medical Director

Tracey LeMaire
OPH, MCH, Child Safety Coordinator

Daphne LeSage
Office of Public Health, Center for Community Health

Nigel Lewis
Office of Public Health, Epidemiologist

Nathan McCallum
State Fire Marshal's Office

Margaret McGarity
Governor's Office of Elderly Affairs

Avis Richard-Griffin
OPH Policy and Planning

Beth Inbau
National Safety Council

Brian Parson
Department of Transportation and Development

Hugh Eley
Office of Aging and Adult Services

Raoult Ratard
Office of Public Health, Louisiana State Epidemiologist

Marilyn Reynard, Medical Director
Office of Public Health, Region2

Jamie Rogues, Regional Administrator
Office of Public Health, Region 2

Mark Ryan
Poison Control Center

Theresa Sokol
Office of Public Health, Epidemiologist

Evon Smith
Department of Health & Hospitals, Emergency Preparedness

Candis Patecek
American Red Cross

Gayla Strahan
Southeast AHEC

Elizabeth Tamor
Southeast Area Health Education Center

Shana Toole
US Consumer Product Safety Committee

Edward Weary
Volunteers of America

Joan Wightkin
Office of Public Health, Maternal Child Health Program

Regina Williams
Office of Public Health, Maternal Child Health Program

Abbreviations/Definition of Terms

CDC - Centers for Disease Control and Prevention - is an agency of the United States Department of Health and Human Services that works to protect public health and safety by providing information to enhance health decisions, and it promotes health through partnerships with state health departments and other organizations.

DHH -Department of Health and Hospitals - the Department of Health and Hospitals protects and promotes health and ensures access to medical, preventive, and rehabilitative services for all citizens of the State of Louisiana.

EMSC – Emergency Medical Services for Children

ICPG - Injury Community Planning Group- this group represents stakeholders in the injury prevention community and oversees injury prevention initiatives in Louisiana.

Injury – Any unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical or chemical energy or from the absence of such essentials as heat or oxygen.

Intentional Injury – Injuries that are purposely inflicted, either by a person to him/herself or to another person. Examples: suicide or attempted suicide, homicide, rape assault, domestic abuse, elder abuse, and child abuse.

IRP - Injury Research and Prevention Program- The purpose of the Injury Research and Prevention Program is to serve as an information and technical assistance resource for injury and disability prevention efforts in Louisiana.

LIPP - Louisiana Injury Prevention Plan – is the product of a collaborative effort with the Injury Research and Prevention Program and stakeholders representing various disciplines throughout the state. The plan outlines goals, strategies, and activities that provide Louisianans with a roadmap that aims to create an injury free Louisiana.

LIRS – Louisiana Injury Reporting System – is an interactive web-based injury query and reporting system.

MIS- Management Information System

Morbidity – Number of persons, nonfatally injured or disabled. Usually expressed as a rate meaning the number of nonfatal injuries in a certain population in a given time period divided by the size of the population.

Mortality - Is the condition of being mortal, or susceptible to death.

OPH - Office of Public Health – the Office of Public Health develops, provides and assures public and environmental health services to protect and enhance the health of Louisiana citizens.

STIPDA - State and Territorial Injury Prevention Director's Association - is a nonprofit organization comprised of public health injury professionals representing all states and territories of the United States. STIPDA's aim is to strengthen the ability of state, territorial and local health departments to reduce death and disability associated with injury and violence.

TBI- Traumatic Brain Injury- occurs when an outside force traumatically injures the brain. TBI can be classified based on severity, mechanism (closed or penetrating head injury), or other features (e.g. occurring in a specific location or over a widespread area).

Unintentional Injury – Injuries that occur without intent to harm. Examples: Motor Vehicle Accident, most burns, drownings, and falls.

References

1. Mona Doshani MD MPH, Mariella Gastanaduy MPH: "Injury Fatalities 2005" releasesd 2008.
2. Ibid
3. Mona Doshani MD MPH: "2004 Nonfatal Injury Hospitals Discharges" released 2008
4. Mona Doshani MD MPH: "2004 Nonfatal Injury Hospitals Discharges" released 2008 Louisiana Hospital Inpatient Discharge Data- Nonfatal Injury Hospital Discharges, 2004
5. Mona Doshani MD MPH: "2009 Falls among Older Adults Report"

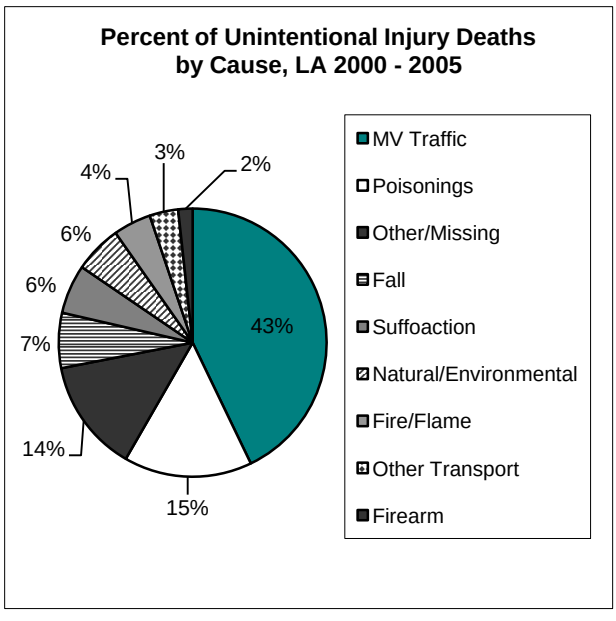
APPENDIX D – Injury Data Reports

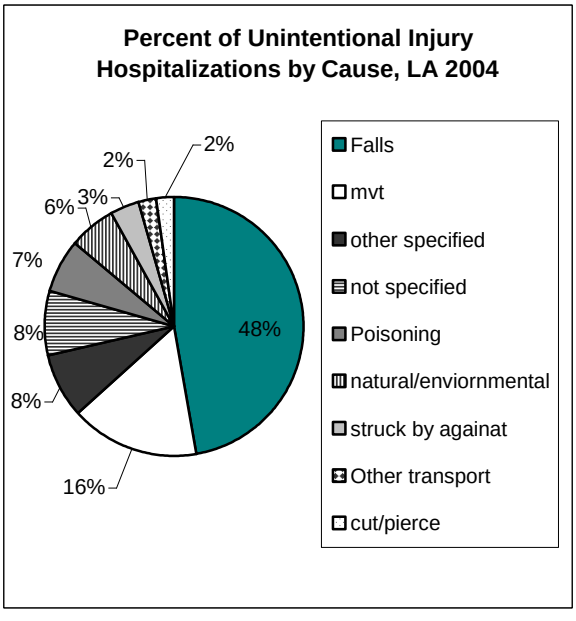
Motor Vehicle Traffic

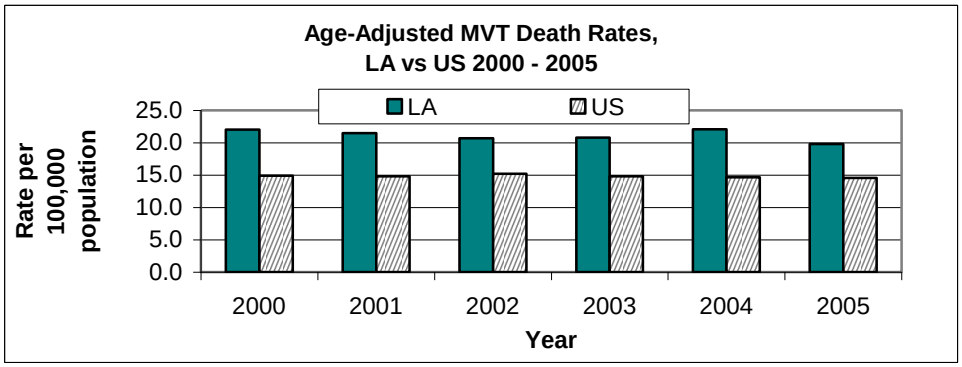
A *motor vehicle* crash involves motor vehicle occupants, as well as incidents were pedestrians and or bicyclists are injured by a motor vehicle. *Motor vehicle traffic* crashes refer to those occurring on public highways and roadways. On the other hand, *motor vehicle non-traffic* crashes refer to collisions occurring in any place other than a public highway, such as parking lots, driveways or off the road activities. In Louisiana, motor vehicle traffic crashes account for approximately 92 percent of all motor vehicle related deaths and about 83 percent of all motor vehicle related non-fatal hospitalizations. In addition, motor vehicle crashes generally occur in an unintentional manner; therefore, data presented in this chapter focuses on unintentional motor vehicle traffic crashes.

Statement of the Problem:

Analysis of Louisiana's 2000 – 2005 cumulative mortality and 2004 non-fatal hospital discharged data indicates that, motor vehicle traffic (MVT) crashes continue to be the leading cause of unintentional injury deaths (42%) and the second leading cause of unintentional injury hospitalizations (16%), for all Louisianans. From 2000 to 2005, there were on average 929 MVT related deaths each year. The MVT age-adjusted death rate decreased minimally (from 22 to 19.8 per 100,000 population) and was consistently higher compared to the United States. In 2004, 3,295 people were hospitalized due to MVT injuries, bringing the MVT hospitalization rate to 73.3 per 100,000 population.

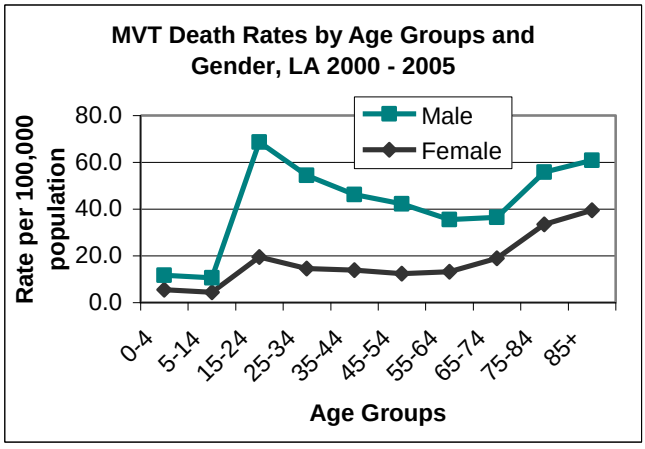


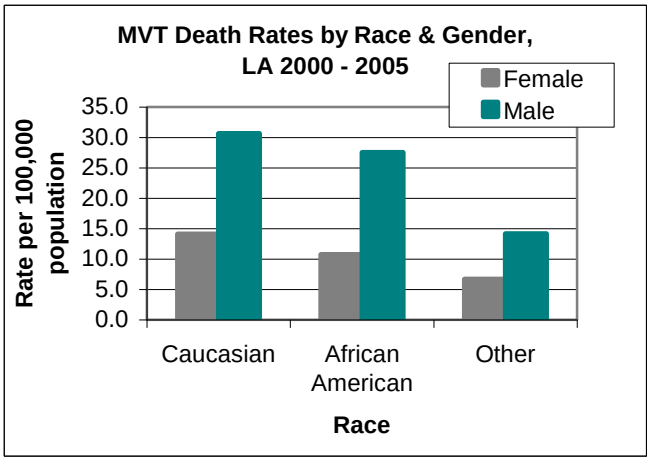




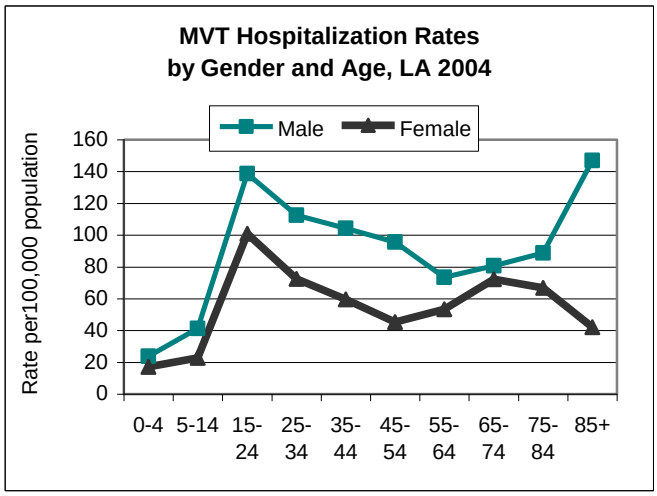
High Risk Groups:

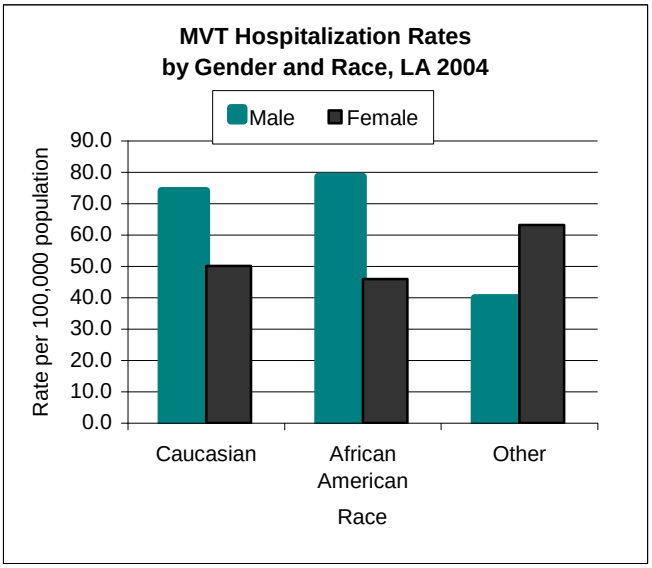
Demographic characteristics, such as age, gender, race, or place of residence, put certain groups at higher risk for MVT injuries. From 2000 to 2005, the MVT death rate was approximately 2.3 times higher in males than in females. The highest death rates were seen among teenagers and young adults, ages 15-24, and among the older population, ages 75 and older. The highest MVT death rates were also seen among Caucasian and African American males and in OPH regions 9, 4, 8, 6, and 5.





In 2004, hospitalization rates due to MVT crashes were highest among males, teenagers and young adults ages 15-24 year olds, and among older adults ages 75+. Rates were also highest among Caucasians and African Americans males. Furthermore, OPH region 9 had the highest hospitalization rate followed by region 6.





High Risk Groups:

- Males
- Teenagers and Young Adults (15 -24)
- Older Adults (74+)
- Caucasian and African American

Young Drivers (15 to 24 years old)

Driver inexperience along with risky behaviors such as speeding, non-seat belt use, drinking and driving and or riding with an intoxicated driver, puts young drivers at a higher risk of being involved in a motor vehicle crash[1]. In Louisiana, an average of 239 young drivers died in a MVT crash from 2000 to 2005, and 612 were hospitalized in 2004. For the same years, young drivers had the highest MVT death and hospitalization rates (34.2 and 87.3 per 100,000 population, respectively) than any other age group.

Louisiana's *graduated licensing law*, designed to delay full licensure while allowing new drivers to obtain experience under lower risk conditions, went into effect on January 1st, 1999. This law states that, first, in order to obtain a learner's license one must be at least 15 years old and have had completed a driver's education course (including a behind the wheel component). Second, to obtain a license or restricted license one must be at least 16 years old and must have had a minimum supervised driving time of 35 hours. Third, it prohibits drivers with a restricted license younger than 17 to drive during the hours of 11 pm and 5 am[2].

Older Drivers (75 and older)

Motor vehicle safety is of great concern as the older population increases nationwide. Some older drivers are at a higher risk of being involved in motor vehicle crashes due to declines in vision, cognitive functions, and other physical impairments that come with age, and are also more vulnerable to severe injuries or death than younger drivers[3]. From 2000 to 2005, an average of 65 Louisianans ages 75 and older, were killed in a MVT crash per year and 144 were hospitalized in 2004. The MVT death and hospitalization rates were 26.7 and 74.8 per 100,000 population, respectively.

License renewal for older drivers vary by state and include shorter intervals for drivers older than a specific age, in person renewal rather than electronically or by mail, and testing (e.g. vision and road test). In Louisiana, license renewal is every four years; however, it must be done in person for drivers, ages 70 and older[4].

Distracted or Drowsy Drivers

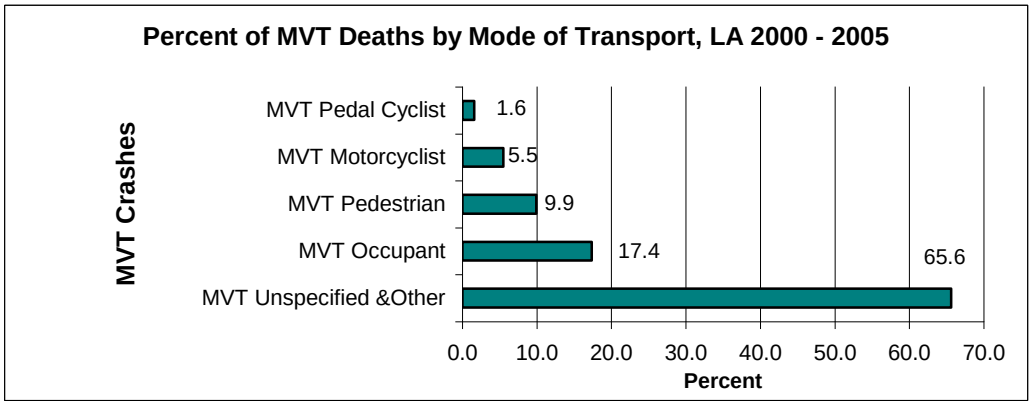
In 2006, The Virginia Tech Transportation Institute and the NHTSA released the findings of a study that tracked the behavior of the drivers of 100 vehicles equipped with video and sensor devices for more than a year. The study revealed that 80% of crashes and 65% of near-crashes involved some form of driver inattention within 3 seconds before the event. Activities that may cause driver inattention are cell phone use, reaching for a moving object and drowsiness. In fact, further data analysis showed that drowsiness increased the risk of a crash or near-crash by at least a factor of four[10].

Extensive research on distractive and drowsy drivers specific to Louisiana is still needed in order to develop effective prevention strategies in this area.

Mode of Transport:

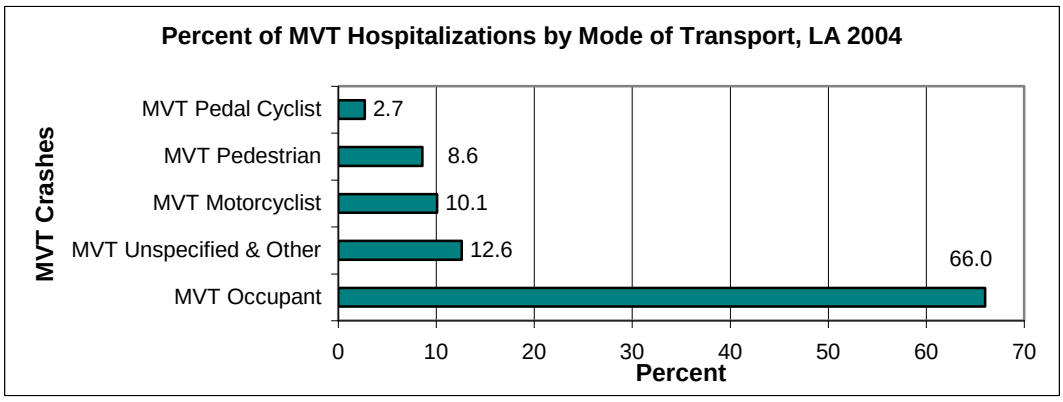
Mode of transport was unspecified for 66 percent of all MVT related fatalities from 2000 to 2005. When specified, v*ehicle occupants* accounted for the majority of all fatal MVT injuries, followed by pedestrians, motorcyclists, and *pedal-cyclists.* More in depth analysis showed that the highest death rates were among:

- 15 -24 year old male motor vehicle occupants,
- 35-44 year old male pedestrians,
- 25-34 year old male motorcyclists, and
- 5-14 and 35-44 year old male pedal-cyclists.



Furthermore, in 2004, vehicle occupants accounted for the majority of all MVT hospitalization followed by unspecified, motorcyclists, pedestrians, and pedal cyclists. The highest hospitalization rates were seen among:

- 15-24 and 85+ year old male motor vehicle occupants,
- 85 and older male pedestrians,
- 25-54 year old male motorcyclists, and
- 5-14 year old male pedal-cyclists.



Alcohol Use

A motor vehicle crash is considered to be alcohol-related if at least one driver or nonoccupant (e.g. pedestrian or pedalcyclist) involved in the crash is determined to have had a blood alcohol concentration (BAC) of 0.01 gram per deciliter (g/dL) or higher. Thus, any fatality that occurs in an alcohol-related crash is considered an alcohol-related fatality or injury (National Highway Safety Administration, 2006).

By law, it is illegal to drive with a BAC of 0.08 g/dL or higher in all 50 states, including the District of Columbia and Puerto Rico. In the United States, 16,885 people died in alcohol-related crashes, representing 39% of all fatal crashes in 2005. Of the 16,885 alcohol-related fatalities in 2005, 86% (14,539) were killed in crashes were at least one driver or nonoccupant had a BAC 0.08 g/dL or above (TFS Alcohol). In addition, the highest percentages of drivers with BAC levels of 0.08 g/dL or higher were recorded for male drivers (23%) and drivers ages 21-34 years old (29%)[5].

Similarly, 394 Louisianans died in alcohol-related crashes, representing 41% of all fatal crashes in 2005. 347 (88%) alcohol-related fatalities occurred in crashes where at least one driver or nonoccupant had a BAC 0.08 g/dL or above. In addition, the highest percentages of drivers with BAC levels of 0.08 g/dL or higher were recorded for male drivers ages 21-34 years old (28%)[5].

Economic Cost and Safety Devices

The National Highway Traffic Safety Administration (NHTSA) estimated that in the year 2000, motor vehicle crashes resulted in 41,821 fatalities, 5.3 million non-fatal injuries, 28 million damaged vehicles, and $230 billion in economic costs to the United States. Included in these costs are medical costs, emergency services costs, rehabilitation costs, productivity losses, legal and court costs, insurance administration costs, travel delay, property damage, and workplace losses. Adjusting the costs for Louisiana, the estimated state economic cost of motor vehicle crashes in 2000 was $4 billion, which represents $895 per person and 3.8 percent per capita personal income[6].

Studies have shown that the use of safety devices such as seat belts, car seats, and helmets, reduces the number of fatal and non-fatal injuries, as well as the economic burden that motor vehicle crashes bring to victims, their family, friends and society as a whole[6]. For instance, nationwide:

- Seat belt use prevents about 11,900 fatalities, 325,000 serious injuries, and saves almost $50,000 billion in medical care, lost productivity, and other injury related cost each year. In contrast, seat belt use failure causes an additional 9,200 fatalities and 143,000 serious injuries, resulting in about $26 billion annually[6].

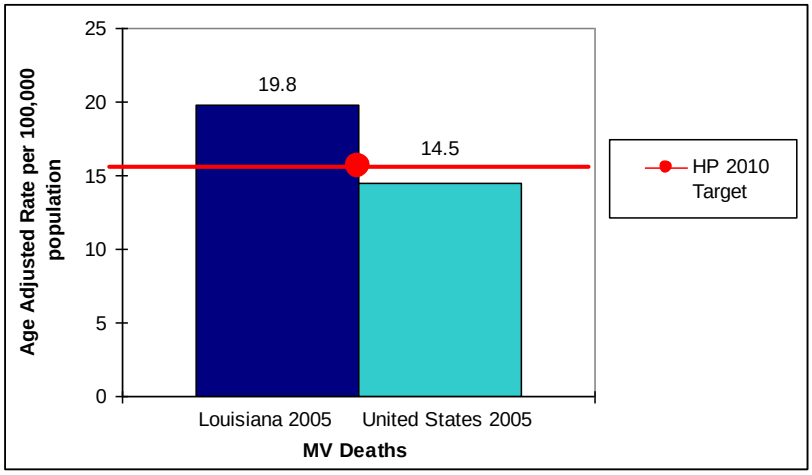
- Child safety seats reduce fatal injury by 71 percent for children less than 1 year old and 54 percent for children ages 1-4[8]. In addition, every $46 spend

on child safety seats saves $1,900, including $140 in medical expenses, $470 in future earnings and other resource costs, and $1,300 in quality of life costs[8].

- Every $10 spend on bike helmets saves $570, including $50 in medical costs, $140 in future earnings and other tangible resources, and $380 in quality of life costs[8].

Healthy People 2010 Motor Vehicle National Goals:

1. Reduce motor vehicle death rate from 15.6 per 100,000 in 1998 to 9.2 per 100,000
2. Reduce nonfatal injuries caused by motor vehicle crashes from 1,181 in 1998 to 933 nonfatal injuries per 100,000
3. Reduce pedestrian death rate on public roads from 1.9 per 100,000 in 1998 to 1.0 per 100,000.
4. Reduce nonfatal pedestrian injuries on public roads from 26 in 1998 to 19 per 100,000
5. Increase the proportion of motorcyclist using helmets from 67% in 1998 to 79%
6. Increase the use of safety belts from 69% in 1998 to 92%
7. For children under 4, increase use of child restraints from 92% in 1998 to 100%
8. Increase the Number of States and the District of Columbia with Laws requiring bicycle helmets for bicycle riders.



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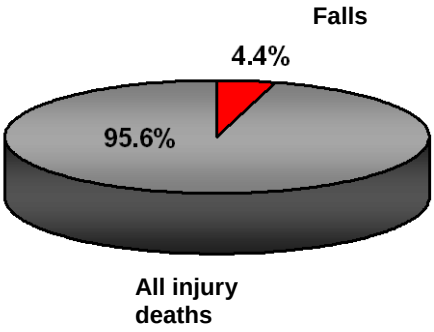
MVT

Falls

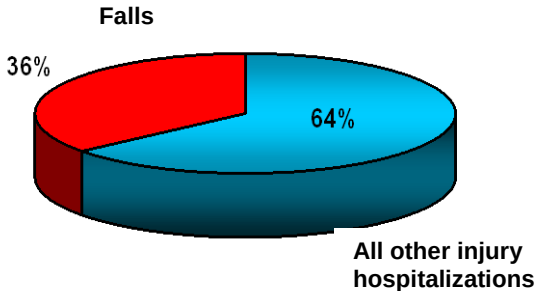
Falls as a major public health Issue:

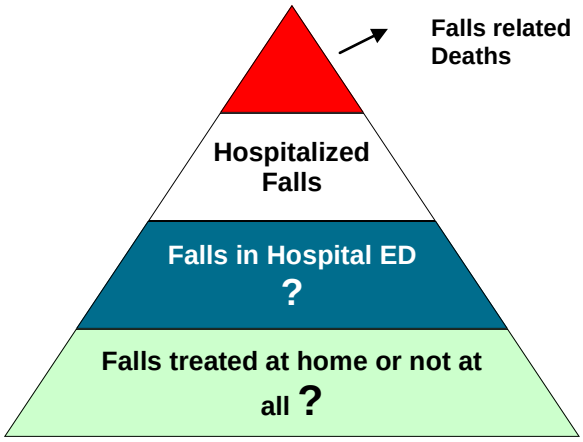
Falls are the leading cause of injury hospitalization in Louisiana. Each year, approximately 9,600 Louisianans are hospitalized for fall-related injuries, accounting for 36 percent of all injury hospitalizations. The injuries received from a fall can result in death, disability, nursing-home admission, and direct medical costs.

Death – Louisiana 2000-2005



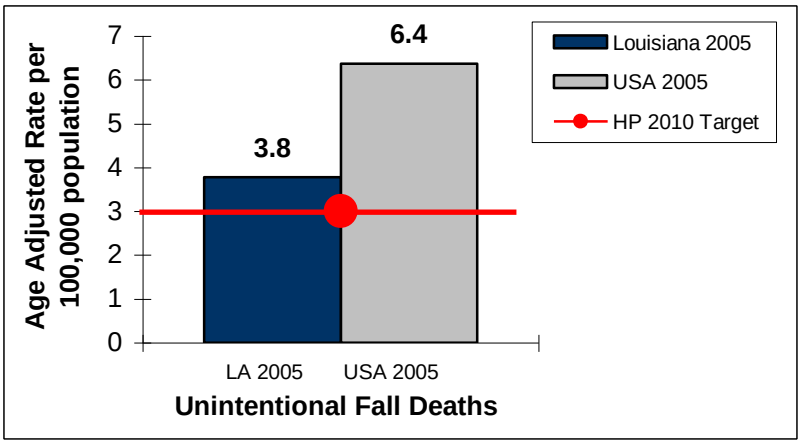
Hospital Discharge – Louisiana 2004





Fall deaths and hospitalizations only reflect a small portion of the much larger toll that injuries are costing the state of Louisiana. Although information on these injuries is often not readily available, it is important to consider these data sources when investigating and addressing the scope of the problem.

Healthy People 2010 initiative for Falls

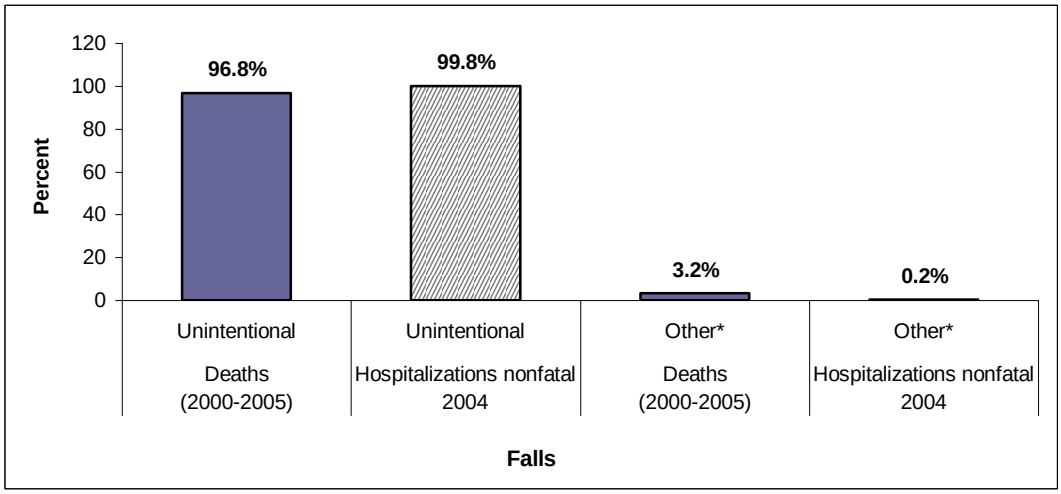


The national goal, as reported in Healthy People 2010, is to reduce fall mortality to 3 deaths per 100,000 population.[1]

In 2005 there were 3.8 deaths per 100,000 population caused by falls in Louisiana which was 1.6 times lower than the national average.

Manner of Death and Hospitalizations for Falls

Unintentional Falls are the leading cause of death and hospitalizations in Louisiana.



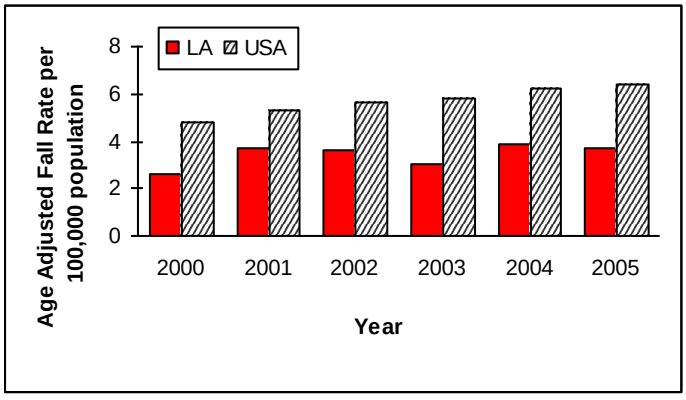
Comparing Unintentional Fall Deaths: United States and Louisiana

Comparing age adjusted death rates for unintentional falls - United States vs. Louisiana (2000-2005)

From 2000 to 2005, the age-adjusted fatality rate for unintentional falls was consistently lower in Louisiana than in the United States.

Each year approximately 150 Louisianans die as a result of a fall injury, resulting in an average age adjusted rate of 3.7 per 100,000 population. Furthermore Louisiana rates during this period was relatively unchanged with death rates averaging 2-3 deahts per 100,000 population, each year.

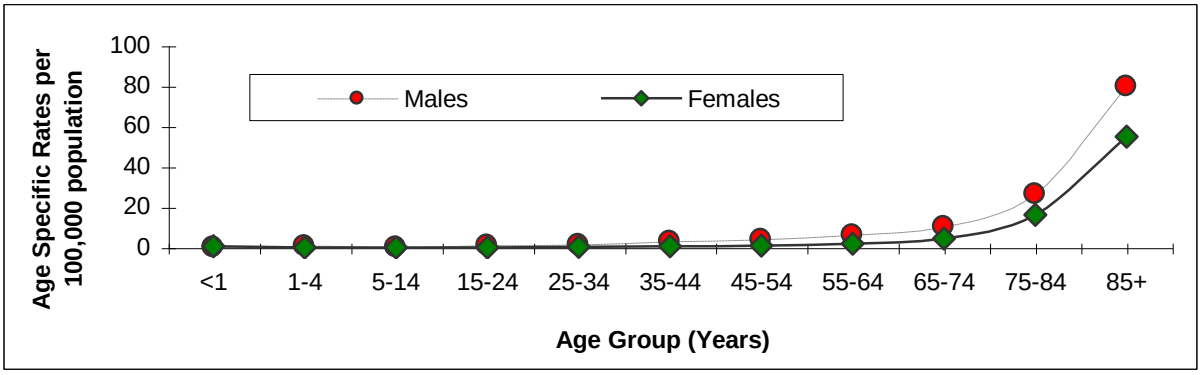
In 2005, nationally 15,800 people 65 and older died from injuries related to unintentional falls; about 1.8 million people 65 and older were treated in emergency departments for nonfatal injuries from falls, and more than 433,000 of these patients were hospitalized.[2,3]



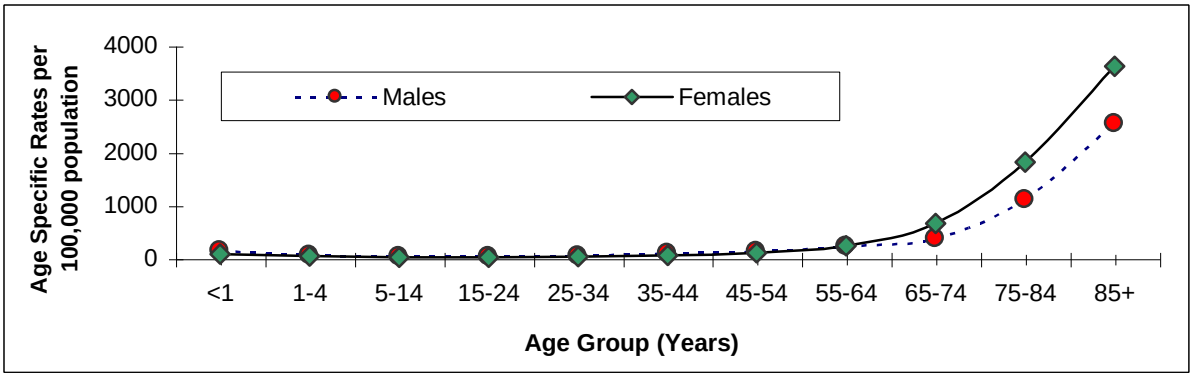
How did these Falls occur?

Mechanism	Number	Percent
Fall on or from stairs or steps	**345**	**3.6%**
Fall on or from ladders or scaffolding	**224**	**2.3%**
Fall from or out of building or other structure (balcony, bridge, building, flagpole, tower, turret, viaduct, wall , window)	**101**	**1.1%**
Fall into hole or other opening in surface (cavity, dock, hole, well, pit, quarry, shaft, swimming pool, tank)	**28**	**0.3%**
Other fall from one level to another	**1,328**	**13.8%**
Fall on same level from slipping, tripping, or stumbling, moving sidewalk	**2,446**	**25.4%**
Fall on same level from collision, pushing, or shoving, by or with other person	**37**	**0.4%**
Other and unspecified fall (Accidental fall NOS, Fall from bumping against object etc)	**5,110**	**53.1%**
Total	**9,619**	**100.0%**

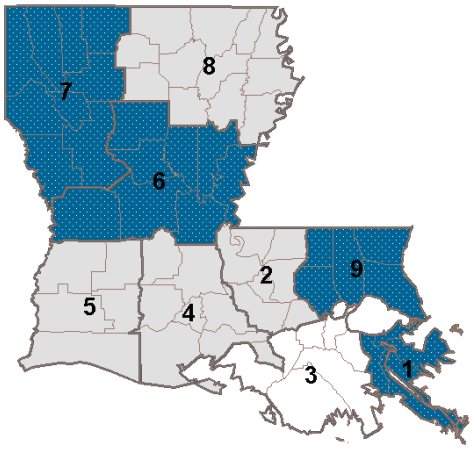
Unintentional Falls Deaths by Age Group and Gender, Louisiana 2000-2005



Unintentional Falls Hospitalizations by Age Group and Gender, Louisiana 2004



OPH Region of Residence –Fall Hospitalizations, Louisiana 2004



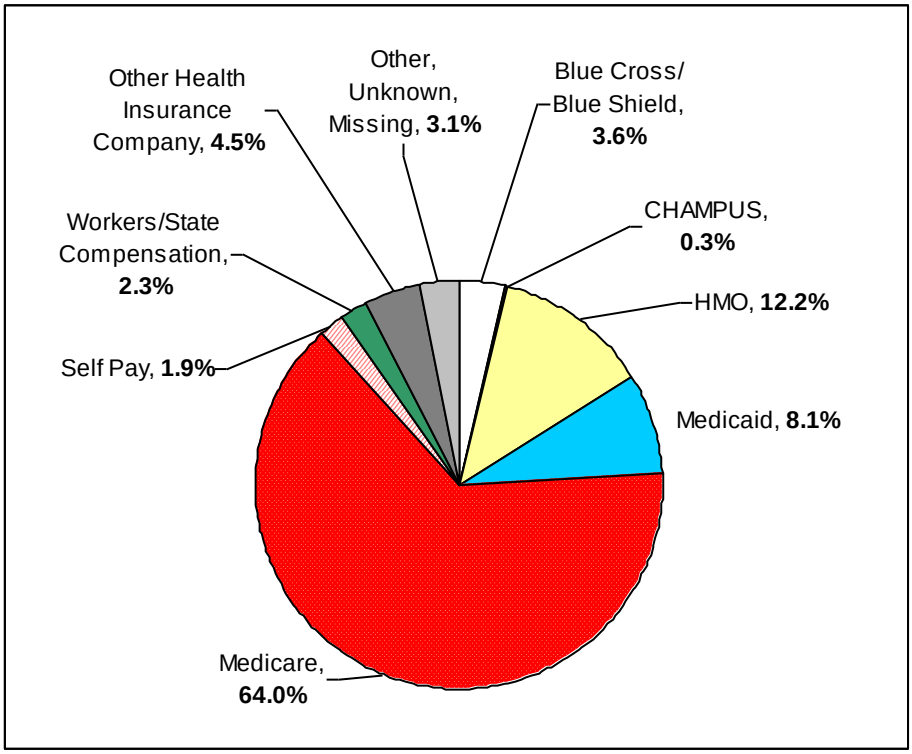
Region	Number	Rate/100,000	Age Adjusted Rate*
1	2,668	265.3	269.0
2	831	136.3	160.6
3	419	107.6	122.5
4	965	173.2	185.4
5	556	195.6	202.8
6	772	259.1	257.9
7	1,507	287.6	267.4
8	682	195.1	187.6
9	1,219	255.0	297.9
Total	**9,619**	**214.0**	**224.2**

During 2000 - 2005, the age specific rate of fatalities from falls increased with age, and rates were significantly higher among men compared with women.

When comparing fall fatalities rates among age groups, children aged 0 to 14 years had the lowest rates in 2005. The death rate dramatically increased within within the aging populating (ages 65+).

OPH region of residence
The age adjusted rate for nonfatal injury hospital discharges (Unintentional Falls) was high in Regions 1, 6, 7 and 9.

Payor Source – Fall hospitalizations, Louisiana 2004



Costs associated with Falls

The costs of fall-related injuries are often shown in terms of direct costs. Direct costs is what patients and insurance companies incur for treating fall-related injuries. These costs include fees for hospital and nursing home care, doctors and other professional services, rehabilitation, community-based services, use of medical equipment, prescription drugs, and changes made to the home, and insurance processing and are incurred at the time of injury. Direct costs do not account for the long-term effects of these injuries such as disability, dependence on others, lost time from work and household duties, and reduced quality of life.

- In 2000, the total direct cost of all fall injuries for people 65 and older exceeded $19 billion: $0.2 billion for fatal falls, and $19 billion for nonfatal falls.[4]
- Cost of Fall related Deaths and Injuries among children ages 14 years and under is more than $94.9 billion [5]
- By 2020, the annual direct and indirect cost of fall injuries is expected to reach $54.9 billion (in 2007 dollars).[6]
- In a study of people age 72 and older, the average health care cost of a fall injury totaled $19,440, which included hospital, nursing home, emergency room, and home health care, but not doctors' services.[7]
- Hospitalizations accounted for nearly two thirds of the costs of nonfatal fall injuries, and emergency department treatment accounted for 20%.[4]
- On average, the hospitalization cost for a fall injury was $17,500.[8]
- The median hospitalization cost for a fall injury in Louisiana was $18,972
- Fractures were both the most common and most costly type of nonfatal injuries. Just over one third of nonfatal injuries were fractures, but they accounted for 61% of costs—or $12 billion.[4]
- Hip fractures are the most frequent type of fall-related fractures. The cost of hospitalization for hip fracture averaged about $18,000 and accounted for 44% of direct medical costs for hip fractures.[8]

Sources: Center for Disease Control and Prevention

Falls among children aged 14 and under (Louisiana 2004)

- Median hospitalization cost for a fall injury was $5,684
- Median length of stay in the hospital was 1 day
- Total charges associated with inpatient stay due to falls $4,509,485

Source: Louisiana Hospital Inpatient Discharge Database (2004)

Falls among older adults aged 65+ years (Louisiana 2004)

- Median hospitalization cost for a fall injury was $18,972
- Median length of stay in the hospital was 5 days
- Total charges associated with inpatient stay due to falls is $159,626,662

Source: Louisiana Hospital Inpatient Discharge Database (2004)

Risk Factors

Falls result from a complex interaction of risk factors. As the number of risk factors increases, the higher is the risk of falling and of being injured. Epidemiologic studies have identified numerous fall risk factors. These are frequently classified as either intrinsic (i.e., originating within the body, such as leg weakness, balance disorders, and visual deficits) or extrinsic (i.e., originating outside the body, such as environmental hazards). Some researchers have further expanded this classification to include behavioral and social/economic risk factors although the evidence for some factors is indirect (e.g., low income is highly associated with poor health status and disability, which, in turn, are associated with increased fall risk)
The table below summarizes this broader representation.[9]

Intrinsic/Biological	Behavioral	Environmental	Social/Economic
♦ Advanced age ♦ Female gender ♦ Chronic illness/disability: Stroke Parkinson disease Heart Disease ♦Incontinence/frequency ♦ Acute illness ♦ Cognitive impairment ♦ Gait disorders ♦ Poor balance ♦ Postural sway ♦ Muscle weakness ♦ Poor vision ♦ Impaired touch and or proprioception	♦ Multiple medications ♦ Use of Tranquilizers Antidepressants Antihypertensive ♦ Excessive alcohol ♦ Risk taking behaviors ♦ Lack of exercise ♦ Previous fall/recurrent fall ♦ Fear of Falling ♦ Inappropriate footwear ♦ Lack, inappropriate use or improper use of mobility aids ♦ Poor nutrition or hydration	♦ Poor building design and /or maintenance ♦ Inadequate building codes ♦ Poor stair design ♦ Lack of: - Handrails - Curb ramps - Rest areas - Grab bars ♦ Poor lightning or sharp contrasts ♦ Slippery or uneven surfaces ♦ Obstacles and tripping hazards	♦ Low income ♦ Lack of education ♦ Illiteracy/language barriers ♦ Poor living condition ♦ Unsafe housing ♦ Poor social environment ♦ Living alone ♦ Lack of support networks and social interaction

Source: Handbook of Injury Violence and Prevention[9]

Falls among Older Adults

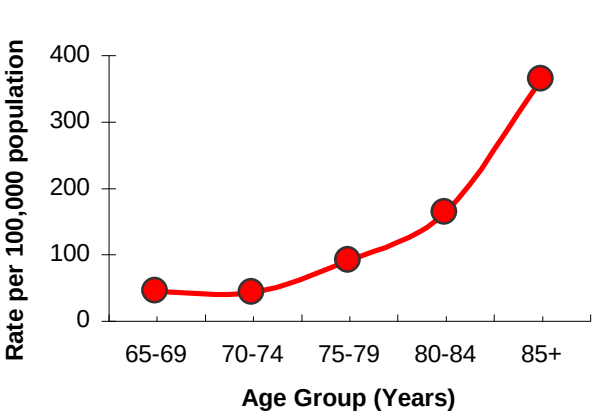
Falls consistently rank among the most serious problems facing older persons and their impact causes a tremendous amount of morbidity, mortality, and disability. In addition to physical injury, falls can have major psychological and social consequences. Fear of falling and loss of self-confidence can cause seniors to limit their activities and lead to reduced mobility, decreased physical fitness, and increased fall risk.

Almost 900 LA residents, two thirds over the age of 65, died in a six-year period (2000-2005) as a result of a fall-related injury (crude rates are 3.7 and 19.0/100,000 compared to National rates 6.0, and 37.2/100,000, respectively). Whites and males were predictive of higher death rates in the 65+ population as a result of fall injuries (21.3 and 21.2/100,000 respectively). Regarding non-fatal hospitalized fall injuries, 6,438 LA events were reported in 2004 alone, in which females had a higher prevalence rate than males. Between 1990 and 2000, the LA age-65+ and 85+ population increased from 10.2 % to 11.6% and 0.10 % to 1.3%, respectively, thereby increasing the number of individuals in the highest risk categories. Sixty two percent of LA citizens (age 18+) reported inadequate physical activity levels (LA-BRFSS, 2006) with implications for balance, muscle strength, coordination, and bone health. Over the last decade, Louisiana has made some progress in reducing the percentage proportion of adults reporting no physical activity. However, the sedentary lifestyle remains more prevalent in Louisiana than in the US.

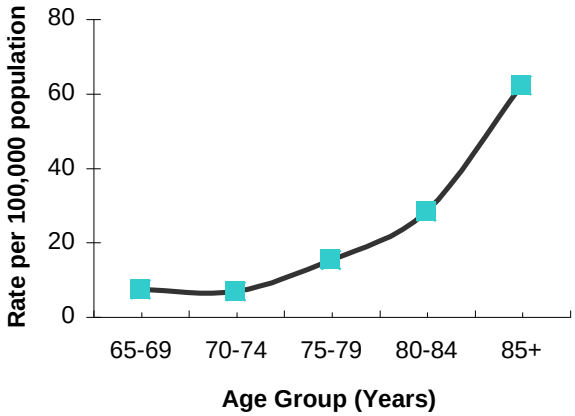
Over thirty percent of the LA population is black. This correlates to an increase in the likelihood of co-morbidities and therefore poorer outcomes in fall patients. LA ranks among the top states in overweight and obesity. Both are considered to be protective predominant factors for osteoporosis and consequently protective of fall-related fractures. However, the negative effects include a lack of flexibility, decreasing joint health, and an unknown impact on general balance problems and trip rates. LA diabetes, rates are higher compared to most states, thus increasing vision and foot sensory loss which is important for fall prevention.
Louisiana also ranks near to or at the bottom percentile of population living below poverty, and also has a higher percentage of distressed/inadequate housing stock thereby increasing environmental balance/trip challenges.

Falls among Older Adults

Unintentional Falls in Older Adults by Age Group

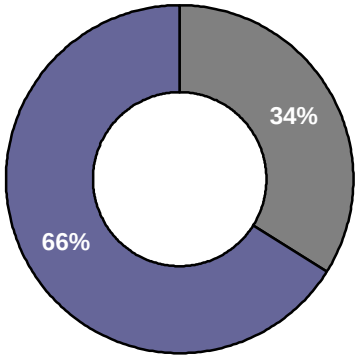


2004 Nonfatal Hospitalizations



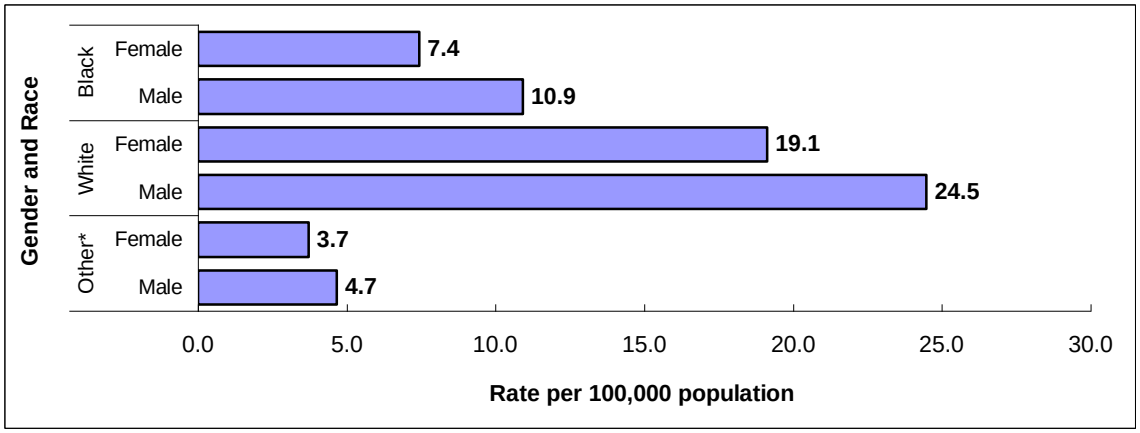
2000-2005 Fatalities

Unintentional Fall Deaths – Falls among older adults aged 65+ years Louisiana 2000 - 2005

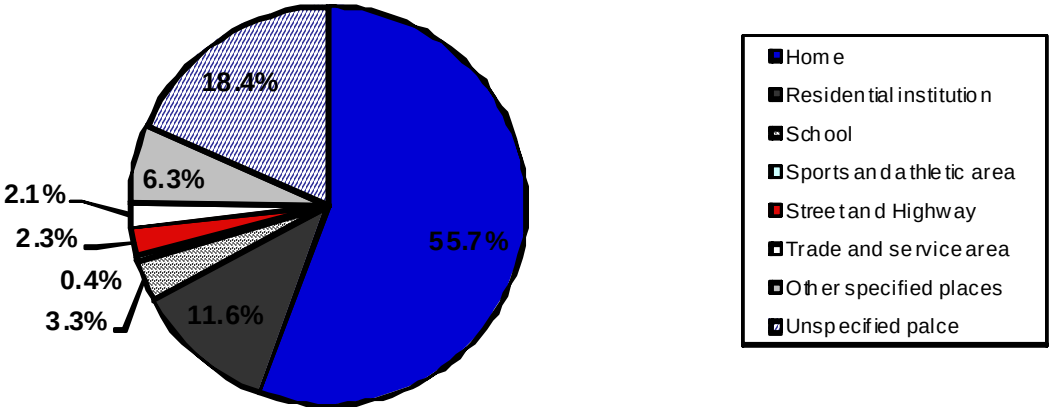


- Among the unintentional fall deaths that occurred in Louisiana, nearly two thirds of the deaths occurred in older adults aged 65 and up.
- Men are more likely to die from a fall than women.
- White males are approximately twice as likely as black males to die as a result of a fall.
- The fall death rate among white females was also higher compared to black females.

Gender and Race

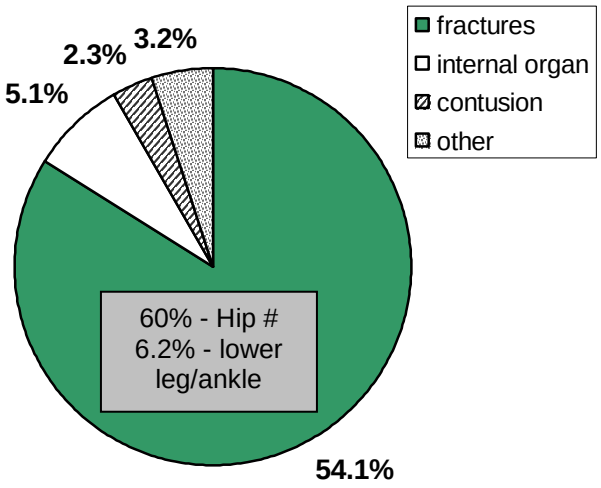


Place of Injury



Almost 56 percent of fatal falls occurred in the home, 12 percent occurred in residential institutions (including nursing homes) and 3.3 % occurred in school. Information on where the fall occurred is unaccounted for in 18 percent of the cases.

Nonfatal Fall Hospitalizations–Falls among older adults aged 65+ years Louisiana 2004



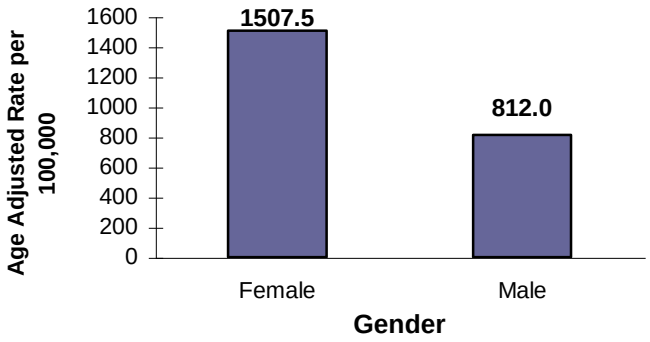
- Fall-related hospitalizations accounted for 68% of all hospitalizations of older adults aged 65+ years.
- Hospital charges totalled $159,626,662, and 21% of the older adults were discharged to a skilled nursing care facility.
- Analysis by injury diagnosis demonstrated that more than 50% of falls among adults ages 65 and older occurred as a result of a fracture, mainly in the hip region.
- Research has shown that hip injuries can cause severe health problems and lead to reduced quality of life and premature death.
- In 1990, researchers estimated that the number of hip fractures would exceed 500,000 by the year 2040.[7]

Falls among older adults aged 65+ years (Louisiana 2004)

- **Median hospitalization cost for a fall injury was $18,972**
- **Median length of stay was 5 days**
- **Total charges associated with inpatient stay due to falls was $159,626,662**

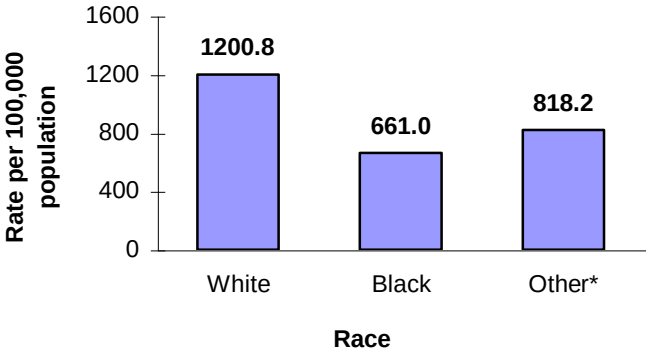
Falls among Older Adults

Gender



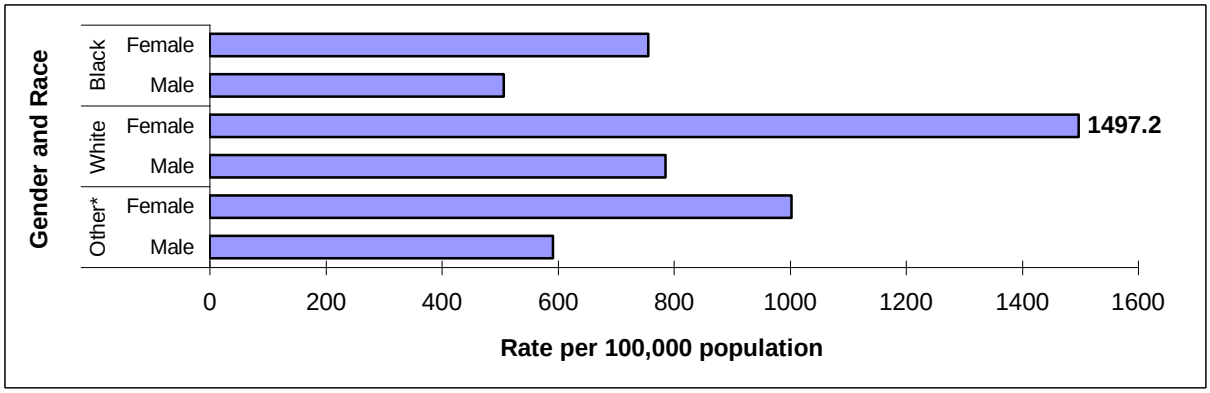
- Older Women are 45% more likely than men to have a nonfatal fall injury.
- After adjusting for age, the nonfatal fall
- 1,507/100,000, which was nearly twice than that of males.
- In addition, the rates of fall-related fractures among older adults are twice as high for women than that for men.
- In 2004, about 75% of older adults admitted to the hospital for hip fractures were women.

Race

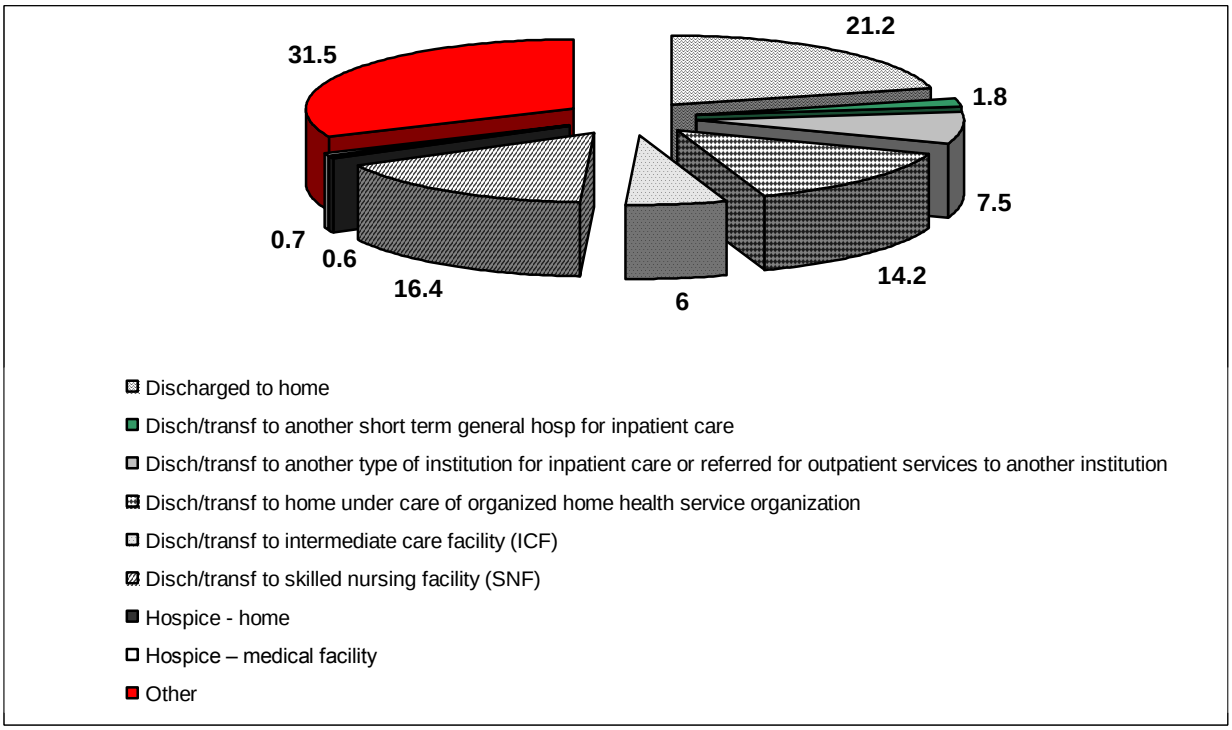


- Older Whites are % more likely than blacks to have a nonfatal fall injury.
- Rate of nonfatal fall rate for whites in 2004 was 1,201 /100,000, which was nearly twice than that of blacks.
- After age 65, white women have the highest hospitalizations rates, followed by women of other race and white males.
- In 2004, about 75% of older adults admitted to the hospital for hip fractures were women.
- White women have higher rates of fall-related hip fractures than black women.

Gender and Race



Discharge Status



Falls in Children

Falls are the leading cause of injury related hospitalizations for children 14 and under, accounting for nearly 20% of injury related admission in Louisiana. Furthermore separating the age categories indicate that falls accounted for 11 percent of injury related hospitalizations for children under age of one, 33 percent for ages 1-4, 23 percent for ages 5-9, and 32 percent for ages 10-14.

On an a average 2 Louisiana children ages 0-14 years die as a result of a fall and nearly 422 children are hospitalized each year for a fall related injury.

Nationally, approximately 100 deaths from falls occur annually and 3 million children require emergency department care for fall related injuries. Data from US consumer Product Safety and Commission (CPSC) on approximately 4700 children who were examined in the Emergency department because of falls from windows during 1993 indicated that 90% falls occurred from the 1st and 2nd stories resulting in internal injuries, concussion, fractures, and head injuries. Hence determining the severity of a fall is determined by the distance of the fall and the landing surface.[11-14]

In Louisiana infants are at a greatest risk for falls from beds and from one level to another (eg: playground, fall from beds and other furniture). Toddlers ages 1-4 years experience falls from slipping, tripping and tumbling and from falls from one level to another (playground, beds, chairs and also from falls which resulting from being struck by or striking an object (striking furniture).

Falls resulting in hospitalization for older children ages 5-14 years are often due to fall from one level and from falling on same level from tripping, slipping and stumbling, which are mainly seen in sports or recreational activities and playground injuries.

How did the fall occur in children?

Fall from bed	47
Fall from playground	37
From furniture	30
Fall from stlips, trips, stumbles	65
Fall from striking against object	34
unspecfied	83
from building	4
Other	122
total	422

Cost of Fall-related hospitalizations, Louisiana 2004

Falls among children aged 14 and under (Louisiana 2004)

- the median hospitalization cost for a fall injury was $5,684
- the median length of stay was 1 day
- Total charges associated with inpatient stay due to falls $4,509,485

Falls in Children

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16) Louisiana Office of Public Health. Louisiana Hospital Inpatient Discharge Database Program (2004).

Poisonings

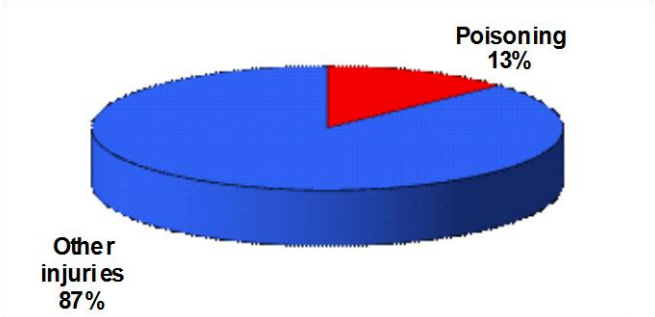
A **poison** is any substance that is harmful to your body when ingested (eaten), inhaled (breathed), injected, or absorbed through the skin.

Poisonings are categorized into either intentional or unintentional. **Unintentional poisoning** includes the use of drugs or chemicals for recreational purposes in excessive amounts, such as an "overdose", where a person has no intention to cause harm. It also includes the excessive use of drugs or chemicals for non-recreational purposes, such as by a toddler. **Intentional poisoning** is the result of a person taking or giving a substance with the intention of causing harm. Suicide and assault by poisoning fall into this category. When the distinction between intentional and unintentional is unclear, poisonings are usually labeled as "undetermined" in intent.[1]

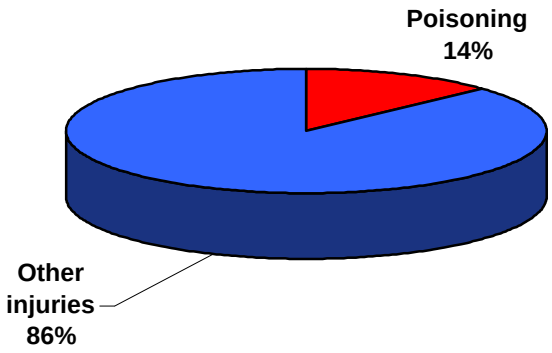
Poisonings a major public health problem

Poisonings are the second leading cause of injury hospitalizations in Louisiana and third leading cause of all injury deaths overall. Each year, approximately 3800 Louisianans are hospitalized for poisonings and 451die. Poisonings account for about 14 percent of all injury hospitalizations and deaths. Nearly all poisoning deaths in the United States are attributed to drugs, and most drug poisonings result from the abuse of prescription and illegal drugs. Among those treated in ED's for nonfatal poisonings involving intentional, non-medical use (such as misuse or abuse) of prescription or over-the-counter drugs in 2004, opioid pain medications and benzodiazepines were used most frequently (SAMHSA 2006). In 2000, poisonings led to $26 billion in medical expenses and made up 6% of the economic costs of all injuries in the United States. nursing-home admission, and direct medical costs.[1] There are 61 Poison Control Centers in the United States which collect information of exposure calls to various agents, including chemicals, medications, animal bites and stings, plants, and use of antivenoms from their network of PCCs. An estimate of the severity of exposure for each call is also determined. Data from the National Poison Control Centers illustrated that over 4.2 million calls were captured in 2007, of which: 2,482,041 were human exposure calls, 1,602,489 information requests, and 131,744 were nonhuman exposure calls.[2] Substances involved most frequently in all human exposures were analgesics (12.5% of all exposures). The most common exposures in children less than age 6 were cosmetics/personal care products (10.7% of pediatric exposures). Drug identification requests comprised 66.8% of all information calls.

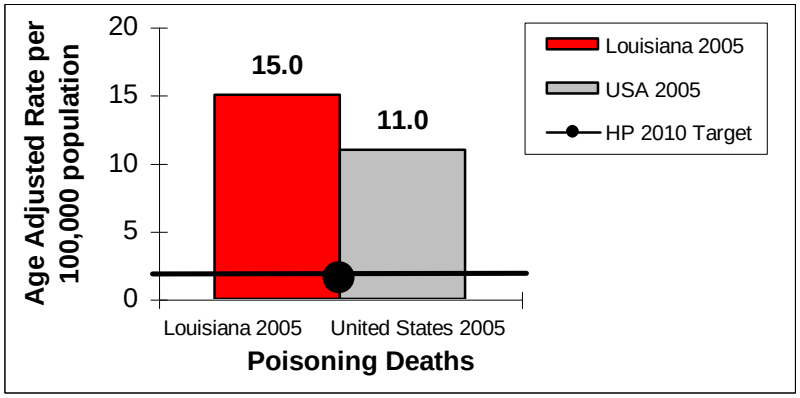
Death – Louisiana 2000-2005



Hospital Discharge – Louisiana 2004



Healthy People 2010 initiative for Poisonings



The national goal, as reported in Healthy People 2010, is to reduce poisoning mortality to 1.5 deaths per 100,000 population.[3]

In 2005 there were 15 deaths per 100,000 population caused by poisoning in Louisiana which was 1.3 times higher than the national average.

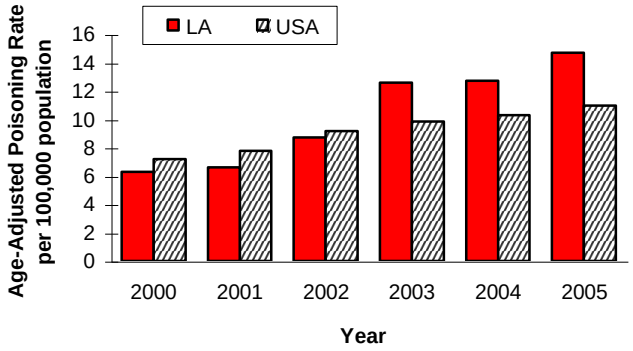
Comparing Poisoning Deaths: United States and Louisiana

Comparing age adjusted death rates for poisonings - United States vs. Louisiana (2000-2005)

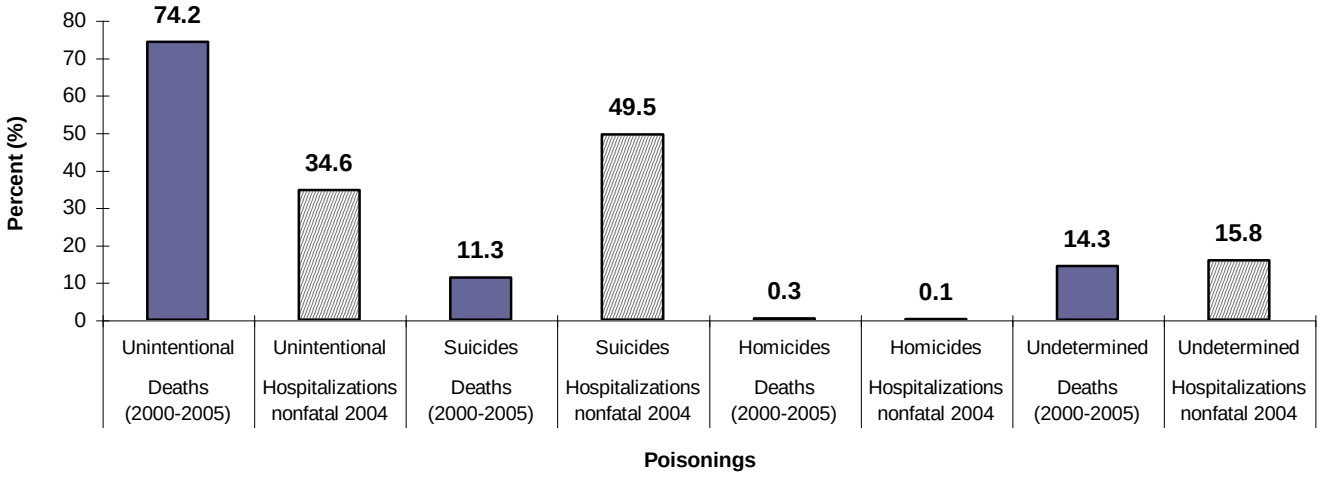
From 2000 to 2002, the age-adjusted fatality rate for poisonings was slightly lower in Louisiana than in the United States. However from 2003-2005 the poisoning rate in Louisiana is rising and has exceeded United States rates during this time period.[4]

In 2005, approximately 650 Louisianans died due to poisonings, resulting in an age adjusted rate of 15 per 100,000 population.

Nationally - In 2005, 23,618 (72%) of the 32,691 poisoning deaths in the United States were unintentional, 5,833 (18%) were intentional and the remaining 3,240 (10%) were of undetermined intent.



Manner of Death and Hospitalizations for Poisonings



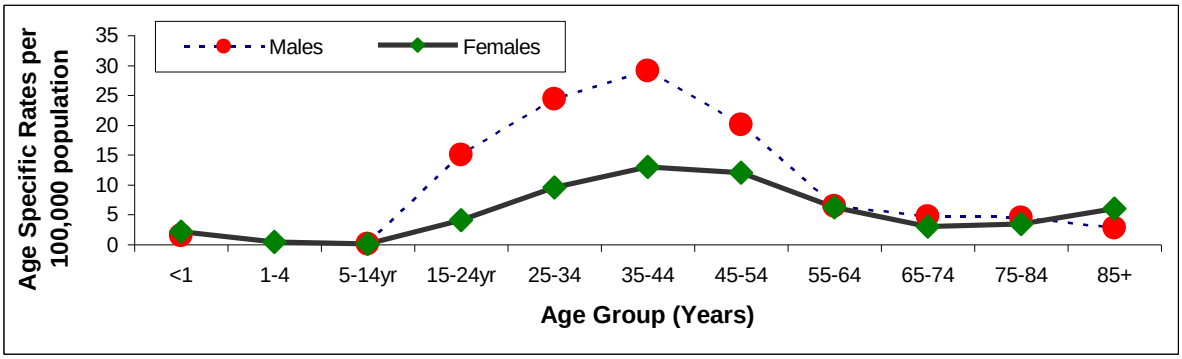
Mechanism of Unintentional Poisoning Hospitalizations, Louisiana 2004

Mechanism	Number	Percent (%)
Accidental poisonings by analgesics, antipyretics and antirheumatics	**313**	**23.4**
➔ Opiates and related narcotics (morphine, opium)	113	8.5
➔ Methadone	50	3.7
➔ Salicylates (aspirin)	27	2.0
➔ Aromatic analgesics (paracetamol)	73	5.5
➔ Other (heroin, methadone, non-narcotic analgesics, antirheumatics, unspecified analgesics and antipyretics	50	3.7
Accidental poisonings by barbiturates and other sedatives and hypnotics	**52**	**3.9**
Accidental poisonings by tranquilizers	**175**	**13.1**
Accidental poisonings by other psychotropic drugs	**144**	**10.8**
➔ Antidepressants	40	
➔ Other (hallucinogens, psychostimulants, CNS stimulants)	104	
Accidental poisonings by drugs acting on CNS and ANS	**128**	**9.6**
➔ Anticonvulsant and anti-parkinsonism drugs	51	
➔ CNS depressants	57	
➔ Other (local anesthetics, adrenergics, antiadrenergics, cholinergics, anticholinergics)	20	
Accidental poisonings by other drugs	**367**	**27.5**
➔ Hormones and synthetic compounds	67	
➔ Agents primarily affecting blood constituents	38	
➔ Agents primarily affecting cardiovascular system	94	
➔ Other specified drugs (central appetite depressants)	52	
➔ Other (antibiotics, systemic agents, agents affecting GI system, water and uric acid metabolism drugs, unspecified drugs)	116	
Accidental poisonings by other solids and liquid substances, gases and vapors	**156**	**11.7**
➔ Alcohol	24	
➔ Other gases & vapors (sulfur dioxide, second hand tobacco smoke, chlorine, unspecified gases)	20	
➔ Other (cleaning and polishing agents, agricultural and horticultural chemical, poisonous foodstuffs and poisonous plants, utility gas & carbon monoxide, corrosives, petroleum)	112	
Total	**1,335**	**100.0**

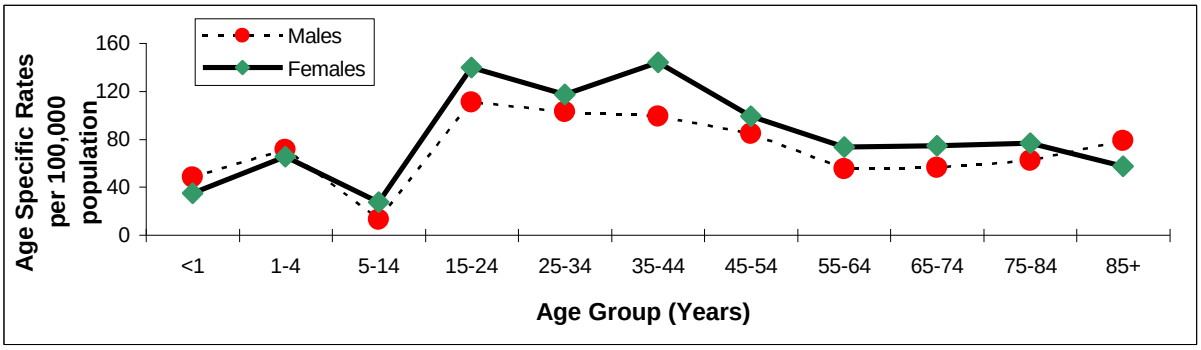
Mechanism of Self-inflicted/Suicide Poisoning Hospitalizations, Louisiana 2004

Mechanism	Number	Percent (%)
Analgesics, Antipyretics, and Antirheumatics	523	27.4
Sedatives	76	4.0
Tranquilizers and other psychotropic agent	681	35.7
Other specified drugs and medicinal substances	490	25.7
Unspecified drugs or medicinal substances	67	3.5
Other	73	3.8
Total	**1,910**	**100.0**

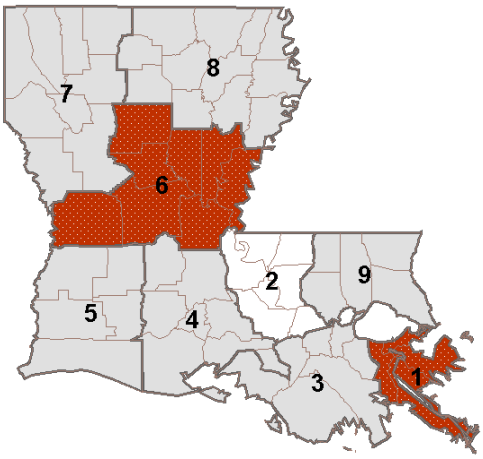
Poisoning Deaths by Age Group and Gender, Louisiana 2000-2005



Poisoning Hospitalizations by Age Group and Gender, Louisiana 2004



OPH Region of Residence –Poisoning hospitalizations, Louisiana 2004

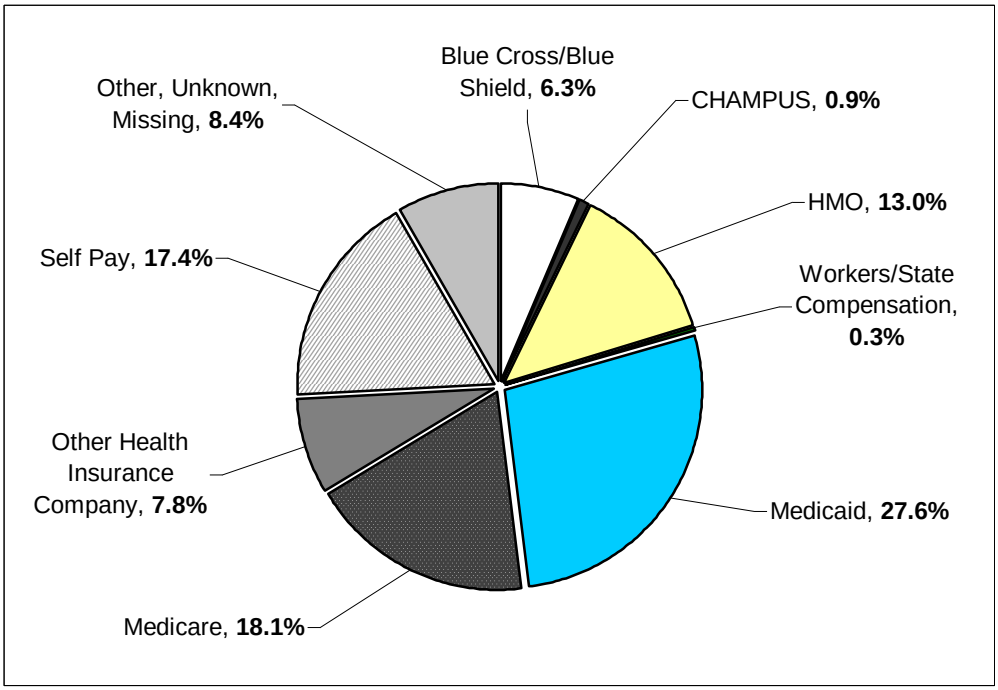


Region	Number	Rate/100,000
1	**1106**	**110.0**
2	364	59.7
3	286	73.5
4	451	81.0
5	242	85.1
6	**275**	**92.3**
7	438	83.6
8	278	79.5
9	418	87.4
Total	**3,858**	**85.8**

During 2000 - 2005, the age specific rate of fatalities from poisonings increased with age, and rates were significantly higher among men compared with women in the age group 15-54 years. When comparing poisoning hospitalization rates among the same age group 15-54 years, females had higher rates. Opiate use and misuse, intake of tranquilizers, appear to be driving the increase in poisonings. Alcohol and drug abuse are also important public health issues that need to be addressed.

OPH region of residence

The age adjusted rate for nonfatal injury hospital discharges (Poisonings) was high in Regions 1and 6.



Costs associated with Poisonings

United States

- In 2000, poisonings led to $26 billion in medical expenses and made up 6% of the economic costs of all injuries in the United States.
- Males accounted for 75% of the total costs of poisoning injuries ($19 billion).
- Females accounted for 25% of the total costs of poisoning injuries (almost $7 billion) (Finkelstein et al. 2006).[6]

Sources: Center for Disease Control and Prevention

Poisoning among all ages (Louisiana 2004)

- Average hospitalization cost for a Poisoning injury was $11,405.51
- Average length of stay was 3 days
- Total charges associated with inpatient stay due to poisonings is $44,002,445

Source: Louisiana Hospital Inpatient Discharge Database (2004)

References

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24) Handbook of Injury and Violence – Springer publications Lynda S. Doll, Sandra E. Bonzo, James A. Mercy, and David A. Sleet Centers for Disease Control and Prevention – 2007.